

EDITORIALS

.....

- death: a review of the literature with special reference to the Canadian situation. Ottawa: Department of Justice Canada, 1994.
9. Brent DA, Perper JA, Allman CJ, Moritz GM, Wartella ME, Zelenak JP. The presence and accessibility of firearms in the homes of adolescent suicides: a case-control study. *JAMA* 1991; 266:2989-95.
10. Kellermann AL, Rivara FP, Somes G, Reay DT, Francisco J, Banton JG, et al. Suicide in the home in relation to gun ownership. *N Engl J Med* 1992;327:467-72.
11. Chapdelaine A, Samson E, Kimberley MD, Viau L. Firearm-related injuries in Canada: issues for prevention. *Can Med Assoc J* 1991;145:1217-22.
12. Hawton K. *Suicide and attempted suicide among children and adolescents*. Beverly Hills, Calif: Sage Publications, 1986.
13. Peterson LG, Peterson M, O'Shanick GJ, Swann A. Self-inflicted gunshot wounds: lethality of method versus intent. *Am J Psychiatry* 1985;142:228-31.
14. Copeland AR. Accidental death by gunshot wound – fact or fiction. *Forensic Sci Int* 1984;26:25-32.
15. Mundt RJ. Gun control and rates of firearms violence in Canada and the United States. *Can J Criminology* 1990;32:137-54.
16. Ornehult L, Eriksson A. Fatal firearm accidents in Sweden. *Forensic Sci Int* 1987;34:257-66.
17. Angus Reid Group. *Firearm ownership in Canada*. Ottawa: Department of Justice Canada, 1991.
18. Kellermann AL, Reay DT. Protection or peril: an analysis of firearm-related deaths in the home. *N Engl J Med* 1986; 314:1557-60.
19. Mauser GA. *Firearms and self defense: the Canadian case*. Paper presented at the annual meeting of the American Society of Criminology; 1993 Oct 30; Phoenix.

Women family physicians and rural medicine

Can the grass be greener in the country?

LESLIE L. ROURKE, MD, CCFP, FAAFP
JAMES ROURKE, MD, CCFP(EM),
MCLSC(FM)
JUDITH BELLE BROWN, PHD

Canada is known for its vast rural areas but less well known is the large size of its rural population. Census data¹ from 1991 reveal that 31.6% of the Canadian population live in rural areas, including communities of up to 10 000 people. Provision of health care is increasingly threatened in many of these areas. Although physicians have always practised in rural areas, it is only recently that rural medicine has been studied as a distinct entity with a need for special skills, and factors that encourage or discourage physicians from pursuing practice in rural settings have been identified.

During the past 30 years, the number of women physicians has increased dramatically. Many women patients, especially younger

ones, prefer women physicians.²⁻⁶ Although largely neglected in the past, factors that are important for treating women patients are now being identified.⁶⁻⁸ Women physicians can be important advocates for adequate and appropriate medical services for women. It is also important to have both male and female physicians as role models for young people contemplating careers in medicine.

The need for women physicians is especially evident in rural areas where many women patients have the same needs and desires as urban women for same-sex health professionals. Also, fewer health services for women, such as breast screening clinics, sexual assault teams, and women's shelters and counseling agencies, are available in rural areas,⁹⁻¹¹ and lack of public transportation in some cases restricts their accessibility.¹¹ The physical and psychological health of rural women has been neglected,¹⁰ and more research is needed on this and other rural health services.¹²

A search of MEDLINE and the *Family Medicine Literature Index* back to 1990 and a manual review of the *Journal of Rural Health* revealed only

seven articles about women physicians practising in rural areas. Their bibliographies were examined. Two supplementary literature searches were run on "rural health resources for women (and rural-urban differences)" and "patients' preferences for physicians' gender." We also used the *Annotated Bibliography of Women in Medicine* by Walters and McNeill,¹³ a resource of more than 450 references from 1938 to 1993, to identify papers with rural components.

Factors affecting all rural physicians

Distinct professional and personal differences are found between rural and urban practice. Most rural family physicians practise with limited or distant specialist backup. The few specialists practising in rural areas are predominantly general surgeons, with smaller numbers of general internists and a few radiologists, psychiatrists, obstetricians, anesthetists, and others.¹⁴⁻¹⁶ Many rural areas also have a shortage of family doctors. For example, in rural Ontario there is one family physician for every 1751 people compared with the provincial rate

EDITORIALS

.....

of one for every 1105.¹⁵ This shortage makes it difficult to limit patient demands on physician time and availability.

Most rural family doctors provide extensive hospital-based medical care in addition to office-based care, housecalls, and nursing home care. In one Ontario study,¹⁴ 74.2% of rural doctors did emergency department work, 58.7% did obstetrics, and 20.5% did anesthesia. This work is often unpredictable and commonly disrupts office practice, recreation, family, and sleep. Physicians in rural practice also face barriers to continuing medical education, including time and cost for travel and difficulty arranging practice coverage when at meetings or conferences.

Recently a fact finder¹⁷ commissioned by the Ontario Ministry of Health, the Ontario Hospital Association, and the Ontario Medical Association identified many of these problems, and stated that the continued provision of basic physicians' services is at risk in most rural areas of Ontario.

Degree of isolation and size of community are also important. A Canadian Medical Association study¹⁶ found that rural physicians closest to urban centres (within 60 km) reported the greatest satisfaction with jobs, hours of work, professional backup, availability of specialists, continuing medical education, spousal job opportunities, cultural opportunities, and children's education. Physicians in the most distant (more than 160 km from urban centres) and smallest (population less than 5000) rural areas reported the least satisfaction.¹⁶

Factors affecting rural women physicians

Physicians often grapple with balancing their multiple roles, especially

women physicians who have young families. The complicated roles of physician, wife, mother, and individual often result in role strain.¹⁸⁻²⁵

Role strain occurs when one tries to manage and fulfil competing but fluctuating role obligations.^{21,26} Whether or not they have full-time careers, women are often expected to be primarily responsible for the home and for children. In many cases, women choose not to delegate these home affairs while pursuing their medical practice.¹⁸ A study²⁷ in the United States of women in academic medicine indicated only 4% of these women's spouses were the primary caregivers to their children during times of illness.

Among female physicians the presence or absence of role strain is associated with level of self-esteem and work satisfaction.^{21,28} In a sample of British female general practitioners, a job's interference with family life was the primary job stress that predicted high levels of job dissatisfaction and lack of mental well-being.²⁹ The ability to balance marriage and medicine has a direct influence on well-being and ability to manage work-related stresses. When the stresses cannot be managed, both family life and career often suffer.^{20,21,28,29}

The multiple roles of women physicians who juggle their medical careers with their marriages, homes, and children can be further complicated in rural settings. First, the hospital and after-hours call responsibility can be difficult for physicians who are mothers. Being mothers affects their hours of work whereas being fathers does not affect men physician's hours.³⁰

A rural setting is less likely to offer a large pool of physicians with whom to job share, if desired. It is also more difficult to find practice

coverage for maternity leave, as physicians available for longer rural locum tenens are even more scarce than are those for short-term placements.

A desire for selectivity in the scope of practice can discourage women physicians from establishing in rural areas. Actual or perceived male colleague resentment or hostility can convince a woman physician to locate in a city where she can have an office-based practice more easily without feeling that she is neglecting a portion of the "duties" of the physicians in the area, such as hospital emergency, obstetrics, and anesthesia responsibilities.

Rural areas often do, however, provide opportunities for women physicians to feel connected with the community. They might feel less isolated when looking for help with child care, as the community often rallies to their aid, especially in emergencies.

Women physicians' spouses differ significantly from the partners of their male counterparts. Ogle et al³¹ found that 75% of women family physicians' spouses are professionals with graduate degrees (usually also physicians) and are most often employed (98.9%). In contrast, fewer than 30% of women married to male family physicians have graduate degrees, only 33% are employed outside the home, and only 13% are employed full time.³¹ The difference in spouse employment rates for male and female doctors is more pronounced among families with children. The high proportion of two career families among women compared with men physicians potentially increases role strain for women whose professional husbands have after-hours commitments as well.

Mutual interest in living in a rural setting is a factor affecting both male and female physicians establishing in rural areas; however, an opportunity for spousal employment is less often a factor listed for male physicians than for female.³¹ Thus, a key factor affecting a woman physician's decision to practise in a rural area might be the absence of job opportunities for her partner.

Not all women physicians are married or have children. Women physicians are more likely to be divorced or never married than men physicians.^{19,30,31} For single women physicians, rural settings offer a smaller pool of social contacts or eligible partners. Maintaining appropriate relationship boundaries in rural practice can pose additional challenges.³² Patients are generally ineligible as potential partners because of these relationship boundaries.³³

Female role models are important for women medical students and practising physicians.^{18,27} Until recently, the scarcity of women physicians practising in rural areas made it difficult for students to find role models of women physicians who exemplify successful ways of combining professional and personal roles in rural communities.

Studies of graduates of American family medicine residencies have found that women physicians feel less well prepared in surgical skills than their male colleagues.³⁴

Many women physicians prefer to use cognitive rather than procedural skills.^{34,35} The fact, or sometimes even just the perception, that rural practice requires proficiency in technical procedures could discourage women physicians from rural practice.

Addressing these concerns

In most developed countries, recruiting and retaining physicians for rural areas is a serious problem. If the current trend of increasing numbers of women physicians who are more likely to practice in urban areas continues, the shortage of rural physicians could worsen. What factors could alleviate this trend?

Challenging issues exist for all rural physicians regardless of sex. Addressing these and other related concerns will help all rural physicians and the rural population they serve.^{16,17,36,37} The following issues are of particular importance to rural women physicians.

Teaming up. The larger scope of practice expected of rural physicians compared with urban physicians (including hospital responsibility) can be addressed in several ways. An increasing number of medical couples find that they can function as a team to provide the flexibility needed for rural practice, marriage, and family.³⁸ In our community, two family physician couples have chosen two different divisions of workload. One couple includes a general practitioner anesthesiologist whose partner does obstetrics for their combined practice. The other couple includes one physician who performs much of the hospital-based work for their practice. Flexibility to fit individuals' interests and talents is the key.

Changes to rural practice. The practice of rural medicine itself is changing. Many areas now have more opportunities for salaried and group practice with flexible creative arrangements regarding hours of work and scope of practice. In addition, many procedure-oriented

male physicians are recognizing the benefits of having women physicians in their group who bring a different and much-needed focus to issues such as women's health.

Payment models. Payment models that recognize and reward evening, night, weekend, and unpredictable work appropriately will encourage some physicians to participate without resenting others, female or male, who do not. In general, physicians do not resent other physicians who omit a certain aspect of practice if that aspect is highly remunerated.

Making conditions of rural practice more attractive will encourage more women family physicians to establish in rural areas, thus creating more role models and more interest in practice sharing and support.

Medical training. Several aspects of medical training can influence the decision to practise in rural settings. As with male doctors, admission of female applicants from rural backgrounds to medical schools, combined with positive rural practice experiences and orientation during undergraduate and postgraduate medical training, could be expected to result in more women choosing rural practice as a career.^{16,36,39-48}

Developing medical schools in rural areas or affiliated decentralized medical schools will not only attract rurally oriented women students, but will also increase the chances of partners who want to live and work in rural areas. Rural women physicians serving as positive role models will be an important part of those medical schools.^{18,25,27} The ideal is a flexible training program that incorporates

EDITORIALS

.....

part-time positions as well as sessions promoting awareness of and strategies for coping with role strain. These programs will assist women's integration of professional, family, and personal life experiences.^{18,20,25}

Special skills. Special skills development is often vital in rural areas. Rural physicians with skills in anesthesia, surgery, and obstetrics and with expertise in psychiatry and women's health are in short supply. This gives women a broad choice of special skills to develop for rural practice while also allowing them to maintain a selected practice scope.

Children's education. Rural educational opportunities for children are an important consideration for recruiting and retaining rural physicians.¹⁶ Rural areas that provide good educational opportunities are more likely to retain rural physicians and provide future rural doctors. Just as sustainable agriculture strives to make the land productive for the present and future, so rural areas can strive to nurture future professionals in their midst.

Benefits. Living and working in many rural communities provide certain benefits, such as living in settings that urban people often choose for their holidays; recreational opportunities; minimal day-to-day commuting; and personal safety, which is rarely an issue. Rural medical practice offers variety and challenge. Rural physicians often have a deeper understanding of their patients, whom they know in many different roles. A sense of community is perhaps the most important aspect of country living. It is easier for physicians, spouses, and children to feel connected and

involved than it is for their counterparts in larger centres. The opportunity to make a difference in one's community is unlimited. Two of the authors are husband and wife family physicians who have enjoyed the challenges and benefits of rural practice for 17 years.

Conclusion

The increasing number of women physicians and the unique features of rural medical practice pose special challenges for the future. More research on women in rural family practice is needed to promote this important aspect of medical care. The reward will be satisfying rural practice for many women as well as men physicians and high-quality medical care for rural communities. Yes, the grass can indeed be greener in the country! ■

Drs Leslie and James Rourke are part-time Assistant and Associate Professors, respectively, in the Department of Family Medicine at The University of Western Ontario in London, and practise rural family medicine in Goderich, Ont. **Dr Brown** is an Assistant Professor at the Centre for Studies in Family Medicine in the Department of Family Medicine at The University of Western Ontario, and is associated with the Thames Valley Family Practice Research Unit.

Acknowledgment

We thank Dr Roger Strasser and his staff at The Monash University Centre for Rural Health, Moe, Victoria, Australia for their support with the initial research for this paper.

Correspondence to: Dr Leslie Rourke, 53 North St, Goderich, ON N7A 2T5

References

1. Statistics Canada. *Urban areas (population and dwelling counts - 1991 Census of Canada)*. Catalogue No. 93-305. Ottawa: Supply and Services Canada, 1992:62.

2. Federal/Provincial/Territorial Working Group on Women's Health. *Working together for women's health: a framework for the development of policies and programs*. Ottawa: Health and Welfare Canada, 1990:1.
3. Thorne S. Women show growing preference for treatment by female physicians. *Can Med Assoc J* 1994;150:1466-7.
4. Weyrauch KF, Boiko PE, Alvin B. Patient sex role and preference for a male or female physician. *J Fam Pract* 1990;30(5):559-62.
5. Fennema K, Meyer DL, Owen N. Sex of physician: patients' preferences and stereotypes. *J Fam Pract* 1990;30(4):441-6.
6. Public Expectations Working Group. *Some views on women's expectations of physicians. EFPO working paper #9*. Toronto: Educating Future Physicians for Ontario, Ontario Ministry of Health, 1992.
7. Robinson GE. Treating female patients. *Can Med Assoc J* 1994;150:1427-30.
8. Phillips S. The social context of women's health: goals and objectives for medical education. *Can Med Assoc J* 1995; 152:507-11.
9. Jennissen T. *Health issues in rural Canada. Background paper*. Ottawa: Library of Parliament, 1992:1.
10. Bushy A. Rural women: lifestyle and health status. *Nurs Clin North Am* 1993; 28(1):187-97.
11. Richardson H. The health plight of rural women. *Women Health* 1987; 12(3-4):41-54.
12. McManus MA, Newacheck PW. Rural maternal, child, and adolescent health. *HSR: Health Services Research* 1989; 23(6):807-48.
13. Walters BC, McNeill IY. *Annotated bibliography of women in medicine*. Toronto: Ontario Medical Association, 1993.
14. Rourke J. Small hospital medical services in Ontario. Part 1: overview. *Can Fam Physician* 1991;37:1589-94.
15. Rourke J. Perspectives on rural medical care in Ontario. *Can Fam Physician* 1991;37:1581-4, 1647.
16. The Advisory Panel on the Provision of Medical Services in Underserved Regions. *Report of the Advisory Panel on the*

EDITORIALS

.....

- Provision of Medical Services in Underserved Regions*. Ottawa: Canadian Medical Association, 1992.
17. Scott GWS. *Small/rural hospital emergency department physician service*. Toronto: Ontario Ministry of Health, 1995.
18. Kettner AS. Female family-practice graduates at the University of Manitoba: career patterns and perceptions. *Can Fam Physician* 1988;34:831-7.
19. Martin SC, Parker RM, Arnold RM. Careers of women physicians: choices and constraints. *West J Med* 1988;149(6):758-60.
20. Hammond JMS. Mother, doctor, wife. *Can Fam Physician* 1993;39:1591-6.
21. Brown JB. Female family doctors: their work and well-being. *Fam Med* 1992;24:591-5.
22. Microys G. Women as doctors, wives, and mothers. *Can Fam Physician* 1986; 32:339-42.
23. Is there a doctor in the house? Medical women's centenary celebrations 1891-1991. *Chiron - J University Melbourne Med Soc* 1992;2(5):53-7.
24. Waters G. Women may be "their own worst enemies" as they attempt to climb medical ladder. *Can Med Assoc J* 1993; 149(8):1159-61.
25. Gray C. Women in medicine: new faces, new roles. *Can Med Assoc J* 1993; 149(10):1549-51.
26. Johnson FA, Johnson CL. Role strain in high-commitment career women. *J Am Acad Psychoanal* 1976;4(1):13-36.
27. Levinson W, Tolle SW, Lewis C. Women in academic medicine: combining career and family. *N Engl J Med* 1989; 321(22):1511-7.
28. Yogev S, Harris S. Women physicians during residency years: workload, work satisfaction and self concept. *Soc Sci Med* 1983;17(12):837-41.
29. Cooper CL, Rout U, Faragher B. Mental health, job satisfaction, and job stress among general practitioners. *BMJ* 1989;298:366-70.
30. Woodward CA, Cohen ML, Ferrier BM. Career interruptions and hours practiced: comparison between young men and women physicians. *Can J Public Health* 1990;81:16-20.
31. Ogle KS, Henry RC, Durda K, Zivick JD. Gender-specific differences in family practice graduates. *J Fam Pract* 1986;23(4):357-60.
32. Rourke JTB, Smith LFP, Brown JB. Patients, friends, and relationship boundaries. *Can Fam Physician* 1993;39:2557-65.
33. McPhedran M, Armstrong H, Edney R. *The final report of the Task Force on Sexual Abuse of Patients*. Toronto: The College of Physicians and Surgeons of Ontario, 1991.
34. Ellsbury K, Schneeweiss R, Montano DE, Gordon KC, Kuykendall D. Gender differences in practice characteristics of graduates of family medicine residencies. *J Med Educ* 1987;62:895-903.
35. Allingham JD, Heaton CJ, Henning B, Longhurst M, Wakefield J. Differences in work plans of graduating family medicine residents by sex. *Can Fam Physician* 1985; 31:1745-7.
36. Rourke J. Politics of rural health care: recruitment and retention of physicians. *Can Med Assoc J* 1993;148:1281-4.
37. Payne JC. Future directions for rural family medicine. *Ont Med Rev* 1993; 60(5):25-31.
38. Joske F. Rural practice - a personal view. *Aust Fam Physician* 1994;23(2):231, 235.
39. Carter RG. The relation between personal characteristics of physicians and practice location in Manitoba. *Can Med Assoc J* 1987;136:366-8.
40. Rabinowitz HK. Evaluation of a selective medical school admissions policy to increase the number of family physicians in rural and underserved areas. *N Engl J Med* 1988;319(8):480-6.
41. Rabinowitz HK. Recruitment, retention, and follow up of graduates of a program to increase the number of family physicians in rural and underserved areas. *N Engl J Med* 1993;328(13):934-9.
42. Rosenblatt RA, Whitcomb ME, Cullen TJ, Lishner DM, Hart LG. Which medical schools produce rural physicians? *JAMA* 1992;268(12):1559-65.
43. Chaulk CP, Bass RL, Paulman PM. Physicians' assessments of a rural preceptorship and its influence on career choice and practice site. *J Med Educ* 1987; 62:349-51.
44. Brazeau NK, Potts MJ, Hickner JM. The Upper Peninsula program: a successful model for increasing primary care physicians in rural areas. *Fam Med* 1990; 22:350-5.
45. Ebbesson SO. The Alaska WAMI Program: a preliminary study of factors affecting specialty choice and practice location. *Alaska Med* 1988;30(2):55-60.
46. Fryer GEJ, Miyoshi TJ, Stine C, Krugman RD. Colorado's decentralized medical education to increase the number of graduates practicing primary care in rural areas. *Acad Med* 1993;68:310-1.
47. Norris TE, Norris SB. The effect of a rural preceptorship during residency on practice site selection and interest in rural practice. *J Fam Pract* 1988;27(5):541-4.
48. Verby JE. The Minnesota Rural Physician Associate Program for medical students. *J Med Educ* 1988;63:427-37.
- • •

Les femmes médecins de famille et la médecine rurale

*Se peut-il que l'herbe soit
plus verte à la campagne ?*

LESLIE L. ROURKE, MD, CCMF, FAAFP
JAMES ROURKE, MD CCMF(URG), MSC(MF),
JUDITH BELLE BROWN, PHD

Le Canada est bien connu pour ses vastes espaces ruraux mais il est moins connu pour la taille importante de sa population rurale. Les données du recensement 1991¹ révèlent que 31,6% de la population canadienne vit en milieu rural, si on inclut les communautés de 10 000 personnes et moins. On constate que la prestation des soins de santé est de plus en plus menacée dans beaucoup de ces régions. Même si les médecins ont toujours exercé en milieu rural, ce n'est que récemment qu'on a commencé à étudier la médecine rurale comme entité distincte en termes de compétences spéciales et à identifier les facteurs qui encouragent ou découragent les médecins à continuer d'exercer dans le contexte rural.

Au cours des 30 dernières années, le nombre des femmes médecins s'est accru de façon spectaculaire. Beaucoup de femmes, particulièrement dans le groupe des plus jeunes, préfèrent consulter une femme médecin.²⁻⁶ Même si on les a négligé dans le passé, on identifie maintenant les facteurs qui sont importants pour traiter les femmes.⁶⁻⁸ Les femmes médecins ont un rôle important à jouer pour défendre le droit des femmes à recevoir des services médicaux adéquats et appropriés. Il est également important que les jeunes qui

envisagent une carrière en médecine puissent être exposés aux modèles médicaux masculin et féminin.

Le besoin de femmes médecins se fait particulièrement sentir en milieu rural où beaucoup de patientes expriment les mêmes besoins et les mêmes désirs que les femmes du milieu urbain de pouvoir consulter des professionnels de la santé du même sexe. Les régions rurales disposent de moins de services de santé pour les femmes, notamment les cliniques de dépistage du cancer du sein, les équipes pour femmes victimes d'agression sexuelle, les centres d'hébergement et les services de counselling pour femmes,⁹⁻¹¹ problème qui est aggravé par l'absence de transport public dans de nombreux cas.¹¹ On a négligé la santé physique et psychologique des femmes du milieu rural,¹⁰ et il faut accentuer la recherche sur cet aspect et les autres services de santé rurale.¹²

Une recherche dans MEDLINE et dans le *Family Medicine Literature Index* rétrospective jusqu'à 1990 et une recherche manuelle dans le *Journal of Rural Health* n'ont pu identifier que sept articles touchant les femmes médecins qui exercent en milieu rural. Leurs bibliographies furent passées en revue. Deux recensions supplémentaires de la littérature furent effectuées sur «les ressources de santé accessibles pour les femmes du milieu rural (et les différences rurales-urbaines)» et sur «les préférences des patientes quant au sexe des médecins». Nous avons également consulté la *Annotated Bibliography of Women in Medicine* de Walters and McNeill,¹³ une ressource contenant plus de 450 références de 1938 à 1993, afin d'identifier les articles touchant le milieu rural.

Facteurs influençant tous les médecins du milieu rural

Entre la pratique urbaine et l'exercice en milieu rural, on constate des différences personnelles et professionnelles distinctives. La plupart des médecins de famille du milieu rural exercent dans un contexte où le support des spécialistes est limité ou distant. Les quelques spécialistes qui exercent en milieu rural sont avant tout des chirurgiens généraux, un petit nombre d'internistes généraux et quelques radiologues, psychiatres, obstétriciens, anesthésistes et autres.¹⁴⁻¹⁶ De plus, bon nombre de régions rurales sont dépourvues de médecins de famille. Dans la partie rurale de l'Ontario par exemple, on compte un seul médecin de famille par 1 751 habitants alors que le taux provincial est de un par 1 105 habitants.¹⁵ Cette pénurie rend difficile de limiter les exigences des patients en termes de temps et de disponibilité du médecin.

La plupart des médecins de famille du milieu rural assurent une vaste couverture de services médicaux hospitaliers en plus des soins dispensés en cabinet, des visites à domicile et des soins dans les foyers de soins infirmiers. Dans une étude ontarienne,¹⁴ 74,2% des médecins du milieu rural oeuvraient au service des urgences, 58,7% pratiquaient l'obstétrique et 20,5% étaient impliqués en anesthésie. Le travail est souvent imprévisible et perturbe couramment l'exercice en cabinet, les activités récréatives, la vie familiale et le sommeil. Les médecins oeuvrant en milieu rural sont également confrontés à des obstacles à leur formation médicale continue, notamment le temps, le coût des déplacements et la difficulté d'organiser la couverture de la pratique pour assister à des colloques ou à des congrès.

Récemment, une mission d'information¹⁷ mandatée par le ministère de la Santé de l'Ontario, l'Association des hôpitaux de l'Ontario et l'Association médicale de l'Ontario a identifié plusieurs de ces problèmes et indiqué que la prestation continue des services médicaux de base était à risque dans la plupart des régions rurales de l'Ontario.

Le degré d'isolement et la taille de la communauté sont également importants. Une enquête de l'Association médicale canadienne¹⁶ a révélé que les médecins du milieu rural situés près des centres urbains (moins de 60 km) étaient les plus satisfaits de leur travail, des heures de travail, du support professionnel, de la disponibilité des spécialistes, de la formation médicale continue, des possibilités de travail pour le conjoint, des activités culturelles et des services éducatifs pour les enfants. Par contre, ce sont les médecins les plus éloignés (plus de 160 km des centres urbains) et oeuvrant dans les régions rurales les moins peuplées (moins de 5 000 habitants) qui ont rapporté le plus faible taux de satisfaction.¹⁶

Facteurs influençant les femmes médecins en milieu rural

Les médecins sont souvent confrontés à équilibrer leurs multiples rôles ; ceci s'applique particulièrement aux femmes médecins qui ont de jeunes familles. Les difficultés d'être à la fois médecin, épouse, mère et une personne autonome sont souvent source de tensions.¹⁸⁻²⁵ Ces tensions au niveau des rôles surviennent lorsqu'on essaie de gérer et de s'acquitter des obligations liées à des rôles compétitifs mais fluctuants.^{21,26} Indépendamment du fait qu'elles poursuivent ou non une carrière à temps plein, on s'attend souvent des femmes qu'elles soient avant tout res-

ponsables du domicile et des enfants. Dans de nombreux cas, les femmes choisissent de ne pas déléguer les responsabilités du domicile tout en continuant d'exercer la médecine.¹⁸ Une autre enquête²⁷ menée aux États-Unis auprès des femmes médecins qui font carrière en milieu universitaire a révélé que seulement 4% de leurs conjoints prenaient la responsabilité primaire des soins aux enfants lorsque ceux-ci étaient malades.

Chez les femmes médecins, il y a une association entre la présence ou l'absence de tensions autour des rôles et le niveau d'estime de soi et de satisfaction au travail.^{21,28} Une enquête menée auprès d'un échantillon d'omnipraticiennes britanniques a révélé que l'interférence entre le travail et la vie familiale était la source primaire de stress au travail capable de prédire des taux élevés d'insatisfaction au travail et de détérioration du bien-être psychologique.²⁹ La capacité d'équilibrer la vie familiale et l'exercice de la médecine influence directement le bien-être et la capacité de gérer le stress relié au travail. Lorsqu'il est devenu impossible de gérer ce stress, il arrive souvent que la vie familiale et la carrière s'en trouvent affectées.^{20,21,28,29}

La pratique en milieu rural peut compliquer davantage les multiples rôles des femmes médecins qui doivent jongler avec leur carrière médicale, leur couple, le domicile et les enfants. En premier lieu, les responsabilités hospitalières et la garde après les heures régulières peuvent être difficiles pour les femmes médecins qui ont des enfants. Le fait d'être mère affecte les heures de travail alors que le fait d'être père n'affecte pas les heures de travail comme médecin.³⁰

Le contexte rural offre moins de possibilités de profiter d'un large réseau de médecins avec qui partager

la tâche lorsqu'on le désire. Il est également plus difficile de trouver quelqu'un pour assurer la couverture de la pratique dans les cas de congé maternité puisque les médecins disponibles pour un remplacement prolongé en milieu rural sont plus rares que les médecins disponibles pour un remplacement de courte durée.

Le désir de faire un choix sélectif dans le champ de pratique peut décourager les femmes médecins à s'installer en milieu rural. Le ressentiment ou l'hostilité réelle ou perçue de la part des collègues masculins peut convaincre une femme médecin de s'installer en milieu urbain où il est plus facile de limiter sa pratique à celle du cabinet sans avoir l'impression qu'elle néglige une partie des « responsabilités » dévolues aux médecins de la région, par exemple l'urgence hospitalière, l'obstétrique et l'anesthésie.

Toutefois, les régions rurales fournissent souvent aux femmes médecins l'occasion d'être impliquées dans la communauté. Elles souffriront moins d'isolement lorsqu'elles recherchent de l'aide pour le soin des enfants puisque ces communautés sont souvent plus ouvertes à ce type d'aide, surtout dans le cadre des soins d'urgence.

Il existe des différences significatives entre les conjoints des femmes médecins et les conjointes de leurs collègues masculins. Ogle et ses collègues³¹ ont constaté que 75% des conjoints des femmes médecins de famille étaient des professionnels détenant un diplôme universitaire (habituellement des médecins) et un emploi (98,9%). Par contre, moins de 30% des femmes mariées à des médecins de famille de sexe masculin détenaient un diplôme universitaire, seulement 33% détenaient un emploi à l'extérieur du foyer et seulement 13% avaient un emploi à

temps plein.³¹ La différence en termes de taux d'emploi entre les conjoints des femmes et des hommes médecins est plus marquée lorsque les familles ont des enfants. La proportion des familles où les deux conjoints poursuivent une carrière professionnelle est plus forte chez les femmes médecins comparativement aux familles des hommes médecins, ce qui accroît la pression sur les femmes dont les maris professionnels ont également des engagements après les heures régulières.

L'intérêt mutuel à vivre dans un contexte rural est un élément qui influence autant l'homme que la femme médecin à vouloir s'établir dans les régions rurales. Par ailleurs, le médecin de sexe masculin liste moins souvent que la femme médecin l'opportunité d'emploi pour le conjoint comme étant facteur important.³¹ On peut donc dire que l'absence d'opportunité d'emploi pour le partenaire est un élément clé influençant la décision de la femme médecin d'exercer en milieu rural.

Ce ne sont pas toutes les femmes médecins qui sont mariées et qui ont des enfants. Comparativement aux médecins de sexe masculin, les femmes médecins sont plus à risque d'être divorcées ou de n'avoir jamais été mariées.^{19,30,31} Pour les femmes médecins célibataires, le contexte rural offre un bassin plus petit de contacts sociaux ou de partenaires potentiels. En milieu rural, le maintien de frontières appropriées dans la relation médecin-patient peut poser d'autres défis.³² À cause de ces frontières qu'impose la relation patient-médecin, les patients ne sont généralement pas des candidats comme partenaires potentiels.³³

Les modèles féminins de rôles sont importants pour les étudiantes en médecine et les praticiens.^{18,27} Jusqu'à tout récemment, la rareté

des femmes médecins oeuvrant en milieu rural n'a pas permis aux étudiantes d'être exposées à des modèles de rôle de femmes médecins qui illustrent les façons de réussir à combiner la vie professionnelle et personnelle dans un contexte rural.

Des enquêtes effectuées auprès des diplômés des programmes américains de résidence en médecine familiale révèlent que les femmes médecins se sentent moins bien préparées que leurs collègues masculins dans le domaine des techniques chirurgicales.³⁴ De nombreuses femmes médecins préfèrent se servir de leurs habiletés cognitives plutôt que des habiletés techniques.^{34,35} Le fait, ou parfois la simple perception, que l'exercice en milieu rural nécessite une bonne maîtrise des actes techniques pourrait détourner les femmes médecins de la pratique rurale.

Analyse de ces préoccupations

Dans la plupart des pays industrialisés, le recrutement et la rétention des médecins dans les régions rurales constituent un problème sérieux. Si la croissance actuelle du nombre des femmes médecins exerçant dans les régions urbaines se poursuit, la pénurie de médecins en régions rurales pourrait s'aggraver. Quels sont les facteurs capables de modifier cette tendance ?

Indépendamment du sexe, l'exercice en milieu rural présente des défis pour tous les médecins. L'examen de ces préoccupations et des problèmes connexes permettra d'aider tous les médecins et la population du milieu rural.^{16,17,36,37} Les enjeux suivants sont particulièrement importants pour les femmes médecins exerçant en milieu rural.

Formation d'équipes. Il existe plusieurs façons d'aborder l'étendue du champ de pratique auquel on

s'attend des médecins du milieu rural comparativement aux médecins du milieu urbain (y compris les responsabilités hospitalières). Un nombre croissant de couples de médecins réalisent qu'ils peuvent fonctionner en équipe et offrir la souplesse nécessaire pour satisfaire la pratique rurale, le mariage et la famille.³⁸ Dans notre communauté, deux couples de médecins de famille ont choisi deux façons différentes de partager la charge de travail. L'un de ces couples est composé d'un médecin de famille anesthésiste dont le partenaire fait de l'obstétrique. L'autre couple est constitué d'un médecin qui assume la majeure partie du travail hospitalier que comporte la pratique. L'élément clé, c'est la souplesse pour accommoder les intérêts et les talents des individus.

Transformation de la pratique rurale.

La médecine rurale elle-même vit des changements. Beaucoup de régions offrent maintenant des possibilités de salariat et de pratique de groupe avec des arrangements permettant la souplesse et la créativité concernant le travail et l'étendue du champ de pratique. De plus, nombre de médecins de sexe masculin plutôt enclins vers les actes techniques reconnaissent les avantages d'avoir dans le groupe des femmes médecins qui contribuent une approche différente et nécessaire à des aspects comme la santé de la femme.

Modes de rémunération.

Les modèles de rémunération qui reconnaissent et récompensent adéquatement le travail de soirée, de nuit, de fin de semaine et les aspects imprévisibles de la pratique encourageront certains médecins à participer sans ressentiment à l'égard des autres, hommes ou femmes, qui sont

moins intéressés à le faire. De façon générale, les médecins n'éprouvent pas de ressentiment lorsque d'autres ne s'impliquent pas dans un aspect de la pratique si cet aspect comporte une forte rémunération.

Si les conditions de l'exercice en milieu rural sont plus attrayantes, plus de femmes médecins de famille seront encouragées à s'établir en milieu rural, augmentant ainsi les modèles de rôle tout en stimulant l'intérêt pour le soutien et le partage des tâches.

Formation médicale. Plusieurs aspects de la formation médicale peuvent influencer la décision de s'établir en milieu rural. Comme pour les médecins de sexe masculin, on pourrait s'attendre à ce que l'admission dans les facultés de médecine de candidates provenant du milieu rural, combinée à des sessions d'orientation et des expériences positives de pratique rurale pendant les études prédoctorales et postdoctorales, encourage plus de femmes à choisir la pratique rurale comme carrière.^{16,36,39-48}

Non seulement la création de facultés de médecine dans les régions rurales ou de programmes décentralisés et rattachés aux facultés de médecine permettrait-elle d'attirer les étudiantes intéressées par le milieu rural mais elle augmenterait également les chances d'attirer les partenaires désireux de vivre et de travailler en région rurale. Les femmes médecins exerçant en milieu rural et servant de modèles de rôle positifs seront une composante importante de ces facultés de médecine.^{18,25,27} L'idéal serait d'instaurer un programme de formation souple où l'on retrouverait des postes à temps partiel et des sessions favorisant la prise de conscience et des stratégies

afin de mieux gérer le stress lié à ces rôles. Ces programmes aideront les femmes à mieux intégrer les expériences professionnelles, familiales et personnelles.^{18,20,25}

Compétences spéciales. La pratique en milieu rural nécessite souvent l'acquisition de compétences spéciales. Les médecins des régions rurales qui possèdent des compétences dans les domaines de l'anesthésie, de la chirurgie et de l'obstétrique et des habiletés spéciales en psychiatrie et en santé de la femme sont en forte demande. Cette situation offre aux femmes un vaste choix pour acquérir des compétences spéciales nécessaires à la pratique rurale tout en leur permettant de maintenir un champ de pratique limité.

Éducation des enfants. Les services éducatifs pour les enfants sont une considération importante pour le recrutement et la rétention des médecins en milieu rural.¹⁶ Les régions qui offrent de bonnes possibilités éducatives sont plus susceptibles de retenir leurs médecins et d'influencer les étudiants à revenir dans leur milieu. Tout comme une agriculture viable vise à rendre la terre fertile et productive pour les générations présente et future, les régions rurales peuvent également prendre des moyens pour faciliter la venue de professionnels dans leur milieu.

Avantages. Dans de nombreuses communautés rurales, le mode de vie et le travail procurent certains avantages comme le fait de vivre dans un contexte que choisissent souvent les gens de la ville pour leurs vacances, leurs activités récréatives, réduire au minimum des trajets quotidiens pour se rendre

au travail et pour leur sécurité personnelle puisque les risques sont presque absents. La médecine rurale est variée et remplie de défis. Les médecins du milieu rural possèdent souvent une meilleure compréhension de leurs patients qu'ils connaissent dans leurs différents rôles. Le sentiment d'appartenance à la communauté est probablement l'aspect le plus important de la vie à la campagne. Il est plus facile pour les médecins, les conjoints et les enfants d'avoir des liens plus étroits et d'être davantage impliqués que leurs collègues des grands centres. Les occasions de s'impliquer au sein de sa communauté sont illimitées. Deux des auteurs forment un couple de médecins qui apprécie depuis 17 ans les défis et les avantages de la pratique en milieu rural.

Conclusion

Le nombre croissant des femmes médecins et les caractéristiques particulières de l'exercice en milieu rural posent des défis spéciaux pour l'avenir. Il faut accentuer la recherche sur les femmes exerçant en milieu rural afin de promouvoir cette composante importante des soins médicaux. Il en résultera une pratique rurale plus satisfaisante pour beaucoup de médecins, autant hommes que femmes, et des soins d'une grande qualité pour les communautés rurales. Oui, il se peut en effet que l'herbe soit plus verte à la campagne ! ■

Les D^{rs} Leslie et James Rourke sont respectivement professeur adjoint et professeur agrégé oeuvrant à temps partiel au Département de médecine familiale de l'Université de Western Ontario à London et exercent la médecine familiale en milieu rural à Goderich, Ontario. **D^{re} Brown**, est professeure adjointe au Centre pour études en médecine familiale au Département de médecine familiale de

l'Université Western Ontario et est rattachée à l'Unité de recherche en médecine familiale Thames Valley.

Remerciements

Nous remercions le Dr Roger Strasser et son personnel du Monash University Centre for Rural Health, Moe, Victoria, Australie, pour leur contribution à la recherche initiale qui a inspiré la rédaction de cet article.

Correspondance à : Dr Leslie Rourke, 53 North St, Goderich, On N7A 2T5

Références

1. Statistiques Canada. *Régions urbaines (dénombrement de la population et des domiciles - Recensement 1991)*. Catalogue No. 93-305. Ottawa : Approvisionnement et Services Canada, 1992:62.
2. Groupe de travail fédéral, provincial et territorial sur la santé de la femme. *Travaillons ensemble pour la santé de la femme : un cadre de travail pour le développement de politiques et de programmes*. Ottawa : Santé et Bien-être social Canada, 1990:1.
3. Thorne S. Women show growing preference for treatment by female physicians. *J Assoc Méd Can* 1994;150:1466-7.
4. Weyrauch KF, Boiko PE, Alvin B. Patient sex role and preference for a male or female physician. *J Fam Pract* 1990; 30(5):559-62.
5. Fennema K, Meyer DL, Owen N. Sex of physician : patients' preferences and stereotypes. *J Fam Pract* 1990;30(4):441-6.
6. Public Expectations Working Group. *Some views on women's expectations of physicians. EFPO working paper #9*. Toronto : Educating Future Physicians for Ontario, ministère de la Santé de l'Ontario, 1992.
7. Robinson GE. Treating female patients. *J Assoc Méd Can* 1994;150:1427-30.
8. Phillips S. The social context of women's health : goals and objectives for medical education. *J Assoc Méd Can* 1995; 152:507-11.
9. Jennissen T. *Health issues in rural Canada. Background paper*. Ottawa : Bibliothèque du Parlement, 1992:1.
10. Bushy A. Rural women : lifestyle and health status. *Nurs Clin North Am* 1993; 28(1):187-97.
11. Richardson H. The health plight of rural women. *Women Health* 1987; 12(3-4):41-54.
12. McManus MA, Newacheck PW. Rural maternal, child, and adolescent health. *HSR : Health Services Research* 1989;23(6):807-48.
13. Walters BC, McNeill IY. *Annotated bibliography of women in medicine*. Toronto : Association médicale de l'Ontario, 1993.
14. Rourke J. Small hospital medical services in Ontario. 1^{re} partie : overview. *Can Fam Physician* 1991;37:1589-94.
15. Rourke J. Perspectives on rural medical care in Ontario. *Can Fam Physician* 1991; 37:1581-4, 1647.
16. The Advisory Panel on the Provision of Medical Services in Underserved Regions. *Report of the Advisory Panel on the Provision of Medical Services in Underserved Regions*. Ottawa : Association médicale canadienne, 1992.
17. Scott GWS. *Small/rural hospital emergency department physician service*. Toronto : Ministère de la Santé de l'Ontario, 1995.
18. Kettner AS. Female family-practice graduates at the University of Manitoba : career patterns and perceptions. *Can Fam Physician* 1988;34:831-7.
19. Martin SC, Parker RM, Arnold RM. Careers of women physicians : choices and constraints. *West J Med* 1988; 149(6):758-60.
20. Hammond JMS. Mother, doctor, wife. *Can Fam Physician* 1993;39:1591-6.
21. Brown JB. Female family doctors : their work and well-being. *Fam Med* 1992; 24:591-5.
22. Microys G. Women as doctors, wives, and mothers. *Can Fam Physician* 1986;32:339-42.
23. Is there a doctor in the house ? Medical women's centenary celebrations 1891-1991. *Chiron - J University Melbourne Med Soc* 1992;2(5):53-7.
24. Waters G. Women may be « their own worst enemies » as they attempt to climb medical ladder. *J Assoc Méd Can* 1993; 149(8):1159-61.
25. Gray C. Women in medicine : new faces, new roles. *J Assoc Méd Can* 1993; 149(10):1549-51.
26. Johnson FA, Johnson CL. Role strain in high-commitment career women. *J Am Acad Psychoanal* 1976;4(1):13-36.
27. Levinson W, Tolle SW, Lewis C. Women in academic medicine : combining career and family. *N Engl J Med* 1989;321(22):1511-7.
28. Yogev S, Harris S. Women physicians during residency years : workload, work satisfaction and self concept. *Soc Sci Med* 1983;17(12):837-41.
29. Cooper CL, Rout U, Faragher B. Mental health, job satisfaction, and job stress among general practitioners. *BMJ* 1989;298:366-70.
30. Woodward CA, Cohen ML, Ferrier BM. Career interruptions and hours practiced : comparison between young men and women physicians. *Can J Public Health* 1990;81:16-20.
31. Ogle KS, Henry RC, Durda K, Zivick JD. Gender-specific differences in family practice graduates. *J Fam Pract* 1986;23(4):357-60.
32. Rourke JTB, Smith LFP, Brown JB. Patients, friends, and relationship boundaries. *Can Fam Physician* 1993;39:2557-65.
33. McPhedran M, Armstrong H, Edney R. *The final report of the Task Force on Sexual Abuse of Patients*. Toronto : L'Ordre des médecins et chirurgiens de l'Ontario, 1991.
34. Ellsbury K, Schneeweiss R, Montano DE, Gordon KC, Kuykendall D. Gender differences in practice characteristics of graduates of family medicine residencies. *J Med Educ* 1987; 62:895-903.
35. Allingham JD, Heaton CJ, Henning B, Longhurst M, Wakefield J. Differences in work plans of graduating family medicine residents by sex. *Can Fam Physician* 1985; 31:1745-7.
36. Rourke J. Politics of rural health care : recruitment and retention of physicians. *J Assoc Méd Can* 1993;148:1281-4.
37. Payne JC. Future directions for rural family medicine. *Ont Med Rev* 1993; 60(5):25-31.



2.5 mg, 5 mg and 10 mg

Antihypertensive Agent/Dihydropyridine Calcium Channel Blocker

INDICATIONS AND CLINICAL USE

PLENDIL® (felodipine) is indicated in the treatment of mild to moderate essential hypertension. PLENDIL should normally be used in those patients in whom treatment with a diuretic or a beta-blocker was found ineffective or has been associated with unacceptable adverse effects.

PLENDIL can be tried as an initial agent in those patients in whom the use of diuretics and/or beta-blockers is contraindicated or in patients with medical conditions in which these drugs frequently cause serious adverse effects.

Combination of PLENDIL with a thiazide diuretic or a beta-blocker has been found to be compatible and showed an additive anti-hypertensive effect. Safety and efficacy of concurrent use of PLENDIL with other antihypertensive agents has not been established.

CONTRAINDICATIONS

PLENDIL (felodipine) is contraindicated in:

- 1) Patients with a known hypersensitivity to felodipine or other dihydropyridines.
- 2) In women of childbearing potential, in pregnancy, and during lactation. Fetal malformations and adverse effects on pregnancy have been reported in animals.

Teratogenic Effects. Studies in pregnant rabbits administered doses of 0.46, 1.2, 2.3 and 4.6 mg/kg/day (from 0.4 to 4 times the maximum recommended human dose on a mg/m² basis) showed digital anomalies consisting of reduction in size and degree of ossification of the terminal phalanges in the fetuses. The frequency and severity of the changes appeared dose-related and were noted even at the lowest dose. These changes have been shown to occur with other members of the dihydropyridine class. Similar fetal anomalies were not observed in rats given felodipine.

In a teratology study in cynomolgus monkeys, no reduction in the size of the terminal phalanges was observed but an abnormal position of the distal phalanges was noted in about 40 percent of the fetuses.

Non-teratogenic Effects. In a study on fertility and general reproductive performance in rats, prolongation of parturition with difficult labour and an increased frequency of fetal and early postnatal deaths were observed in the groups treated with doses of 9.6 mg/kg/day and above.

Significant enlargement of the mammary glands in excess of the normal enlargement for pregnant rabbits was found with doses greater than or equal to 1.2 mg/kg/day. This effect occurred only in pregnant rabbits and regressed during lactation. Similar changes in the mammary glands were not observed in rats or monkeys.

WARNINGS

Congestive Heart Failure. The safety and efficacy of PLENDIL (felodipine) in patients with heart failure has not been established. Caution should, therefore, be exercised when using PLENDIL in hypertensive patients with compromised ventricular function, particularly in combination with a beta-blocker. Acute hemodynamic studies in a small number of patients with New York Heart Association Class II or III heart failure treated with felodipine have not demonstrated negative inotropic effects.

Hypotension, Myocardial Ischemia. PLENDIL may, occasionally, precipitate symptomatic hypotension and rarely syncope. It may lead to reflex tachycardia which, particularly in patients with severe obstructive coronary artery disease, may result in myocardial ischemia. Careful monitoring of blood pressure during the initial administration and titration of felodipine is recommended. Care should be taken to avoid hypotension especially in patients with a history of cerebrovascular insufficiency, and in those taking medications known to lower blood pressure.

Beta-Blocker Withdrawal. PLENDIL gives no protection against the dangers of abrupt beta-blocker withdrawal; any such withdrawal should be a gradual reduction of the dose of beta-blockers.

Outflow Obstruction. PLENDIL should be used with caution in the presence of fixed left ventricular outflow obstruction.

PRECAUTIONS

Peripheral Edema. Mild to moderate peripheral edema was the most common adverse event in the clinical trials. The incidence of peripheral edema was dose-dependent. Frequency of peripheral edema ranged from about 10 percent in patients under 50 years of age taking 5 mg daily to about 30 percent in those over 60 years of age taking 20 mg daily. This adverse effect generally occurs within 2-3 weeks of the initiation of treatment. Care should be taken to differentiate this peripheral edema from the effects of increasing left ventricular dysfunction.

Use in Elderly Patients or in Patients with Impaired Liver Function. Patients over 65 years of age as well as patients with impaired liver function may have elevated plasma concentrations of felodipine and, therefore, may require lower doses of PLENDIL. These patients should have their blood pressure monitored closely during the initial administration and dosage adjustment of PLENDIL, and should rarely require doses above 10 mg per day. (See Pharmacokinetics and DOSAGE AND ADMINISTRATION.)

Gingival Hyperplasia. PLENDIL can induce gingival enlargement in patients with pronounced gingivitis and parodontitis. However, such changes may be reversed by measures of good oral hygiene and mechanical debridement of the teeth.

Pregnancy and Lactation. See CONTRAINDICATIONS.

Use in Children. PLENDIL is not recommended in children since the safety and efficacy in children have not been established.

Drug Interactions. *Beta-Adrenoceptor Blocking Agents:* A pharmacokinetic study of felodipine in conjunction with metoprolol demon-

strated no significant effects on the pharmacokinetics of felodipine. The AUC and C_{max} of metoprolol, however, were increased approximately 31 and 36 percent, respectively. In controlled clinical trials, however, beta-blockers including metoprolol were concurrently administered with felodipine and were well tolerated.

Cimetidine: In healthy volunteers pharmacokinetic studies showed an approximately 50 percent increase in the area under the plasma concentration time curve (AUC) as well as the C_{max} of felodipine when given concomitantly with cimetidine. It is anticipated that a clinically significant interaction may occur in some hypertensive patients. Therefore, it is recommended that low doses of PLENDIL be used when given concomitantly with cimetidine.

Digoxin: When given concomitantly with felodipine as conventional tablets the peak plasma concentration of digoxin was significantly increased. With the extended release formulation of felodipine there was no significant change in peak plasma levels or AUC of digoxin.

Phenytoin, carbamazepine and phenobarbital: In a pharmacokinetic study maximum plasma concentrations of felodipine were considerably lower in epileptic patients on long term anticonvulsant therapy (phenytoin, carbamazepine, phenobarbital) than in healthy volunteers. The mean area under the felodipine plasma concentration-time curve was also reduced in epileptic patients to approximately 8% of that observed in healthy volunteers. Since a clinically significant interaction may be anticipated, alternative antihypertensive therapy should be considered in these patients.

Other Concomitant Therapy: In healthy subjects there were no clinically significant interactions when felodipine was given concomitantly with indomethacin or spironolactone.

ADVERSE REACTIONS

In 1102 patients treated with felodipine, either alone or in combination with other antihypertensive agents, adverse events were reported in 52% of patients and caused discontinuation of therapy in 9%. The most common adverse events (incidence of at least 1%) were: peripheral edema (21.3%), headache (14.9%), feeling of warmth/flush (13.2%), dizziness/vertigo (4.6%), fatigue (2.4%), palpitation (1.6%), extrasystoles (1.5%), nausea (1.5%), pain (1.5%), paraesthesia (1.2%), chest pain (1.1%).

In addition, the following events were reported with an incidence of less than 1 percent (Adverse Events that were Judged Serious are in Bold Face): **Cardiovascular:** angina pectoris, myocardial infarction, atrial fibrillation, arrhythmia, abnormal ECG, AV block, bundle branch block, postural hypotension, syncope, tachycardia, bradycardia. **Central & Peripheral Nervous System:** brain stem disorder, tremor, abnormal gait, anxiety, depression, insomnia, nervousness, somnolence, agitation, apathy, increased appetite, impaired concentration, confusion, emotional lability, hallucination, sleep disorder, malaise. **Gastrointestinal:** abnormal hepatic function, cholestatic hepatitis, abdominal pain, vomiting, constipation, diarrhea, dyspepsia, dysphagia, flatulence, gingivitis, gum hyperplasia, gingival bleeding, dry mouth, salivary gland enlargement. **Dermatologic:** photosensitivity reaction, erythema nodosum, eczema, pruritus, rash, increased sweating. **Musculo-skeletal:** arthralgia, myalgia. **Respiratory:** cough, dyspnea. **Genito-urinary:** impotence, dysuria, frequent urination. **Others:** abnormal vision, anemia, substernal chest pain, asthenia, generalized edema, periorbital edema, facial edema, change in weight, chills.

Laboratory tests: For the following laboratory values statistically significant decreases were observed: bilirubin, red blood count, hemoglobin, and urate. Statistically significant increases were found in erythrocyte sedimentation rate and thrombocyte count. None of these changes were considered to be of clinical significance.

In addition, the following abnormal blood chemistry results were reported: hypokalemia, hyperkalemia, hyponatremia.

DOSAGE AND ADMINISTRATION

PLENDIL should be swallowed whole and not crushed or chewed.

The dose should be adjusted individually according to patient response.

The recommended initial dose is 5 mg once daily. The 2.5 mg tablet is available for dose titration purposes. The usual maintenance dosage range is 5-10 mg once daily. Dose adjustment, if necessary, should be done at intervals of not less than two weeks. The maximum recommended daily dose is 20 mg once a day. In clinical trials 20 mg once daily showed an increased blood pressure response but also a large increase in the rate of peripheral edema and other vasodilatory adverse events (see ADVERSE REACTIONS). Modification of the recommended dosage is usually not required in patients with renal impairment. Plendil tablets are extended release, film-coated tablets, containing felodipine in strengths of 2.5 mg, 5 mg and 10 mg.

Use in the Elderly or in Patients with Impaired Liver Function. Patients over 65 years of age or patients with impaired liver function, may have elevated plasma concentrations of felodipine (see PRECAUTIONS). In these patients an initial treatment of 2.5 mg daily should be considered. In general, doses above 10 mg should not be considered in these patients.

Product monograph available on request.

References: 1. Lederle RM et al. *Drug Investigation* 1994;8(6):369-376. 2. Weber MA et al. *Clinical Pharmacology and Therapeutics* 1994;55(3):346-352. 3. Gradman AH. *American Heart Journal* 1992;123(1):273-278. 4. Todd PA and Faulds D. *Drugs* 1992;44(2):251-277. 5. Lorimer AR and Pringle SD. *Journal of Cardiovascular Pharmacology* 1990;15(5):S85-S89. 6. Koolen et al. *American Journal of Cardiology* 1994;74:730-732. 7. Nordlander M et al. *Pharmacology & Toxicology* 1995;76:56-62. 8. Plendil (felodipine) Product Monograph. 9. 1995 ODB price list.

ÉDITORIAUX

.....

38. Joske F. Rural practice - a personal view. *Aust Fam Physician* 1994;23(2):231, 235.
39. Carter RG. The relation between personal characteristics of physicians and practice location in Manitoba. *J Assoc Méd Can* 1987;136:366-8.
40. Rabinowitz HK. Evaluation of a selective medical school admissions policy to increase the number of family physicians in rural and underserved areas. *N Engl J Med* 1988; 319(8):480-6.
41. Rabinowitz HK. Recruitment, retention and follow up of graduates of a program to increase the number of family physicians in rural and underserved areas. *N Engl J Med* 1993;328(13):934-9.
42. Rosenblatt RA, Whitcomb ME, Cullen TJ, Lishner DM, Hart LG. Which medical schools produce rural physicians? *JAMA* 1992;268(12):1559-65.
43. Chaulk CP, Bass RL, Paulman PM. Physicians' assessments of a rural preceptorship and its influence on career choice and practice site. *J Med Educ* 1987; 62:349-51.
44. Brazeau NK, Potts MJ, Hickner JM. The Upper Peninsula program : a successful model for increasing primary care physicians in rural areas. *Fam Med* 1990; 22:350-5.
45. Ebbesson SO. The Alaska WAMI Program : a preliminary study of factors affecting specialty choice and practice location. *Alaska Med* 1988;30(2):55-60.
46. Fryer GEJ, Miyoshi TJ, Stine C, Krugman RD. Colorado's decentralized medical education to increase the number of graduates practicing primary care in rural areas. *Acad Med* 1993;68:310-1.
47. Norris TE, Norris SB. The effect of a rural preceptorship during residency on practice site selection and interest in rural practice. *J Fam Pract* 1988;27(5):541-4.
48. Verby JE. The Minnesota Rural Physician Associate Program for medical students. *J Med Educ* 1988;63:427-37.

• • •



ASTRA

Astra Pharma Inc., Mississauga, Ontario L4Y 1M4