THE STATUS OF NURSING RESEARCH FUNDING - An issue for the 90'S

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Nursing research is essential to the development of knowledge and skills that ensure effective and safe nursing care. There is a reality accepted by practitioners who face a major obstacle when they plan to study various aspects of their practice - a lack of funding. The current funding infrastructure in Canada creates limitations with wide ranging implications (Beaton, 1990; Stinson, Lamb & Thibaudeau, 1990):

The paucity of research funding pertains not only to the design and conduct of investigations but as well to the support of such infrastructure as research training, university and health care agency based clinical researchers, seed money, research development programs in health care agencies, scientific travel, conferences and journals - and the development of research units. (Stinson, Lamb & Thibaudeau, 1990, p.118)

It appears that not only is the funding situation for Canadian nursing research at a low level but also, that it has been retrogressive for years. In this paper, evidence is presented to support these two assertions, implications of the reality are considered and suggestions are made about how to begin tackling the situation.

What Has Been the Status of Funding for Nursing Research?

There is some research funding for nurses. For instance, in 1986-1987, 43 projects were funded for a total of \$1,235,811. However, Ritchie (1988) pointed out that, of these notations from the *Reference List of Health Service Research in Canada* (MRC, 1987), 67% of the funds had come from the Ontario Minister of Health and 14% were from the Alberta Foundation for Nursing Research, leaving only 19% from other sources. That is, the main federal government funding agencies, such as the National Sciences and Engineering Research Council (NSERC), the Social Sciences and Humanities Research Council (SSHRC), the Medical Research Council (MRC), and the National Health Research Development Program (NHRDP),

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did not strongly support nursing research in that year. Therefore, while there is funding, a closer analysis indicates problems that are highlighted by consideration of a ten-year history of funding of nursing research in Canada; a look at the comparable American nursing scene; and, the funding, by our federal government, of other disciplines.

The Canadian Nurses Association has tabulated the total number of research projects and the funding over the past ten years (see Table 1). These figures were gathered from the annual *Reference List of Health Science Research in Canada*, which is published by the MRC and includes grants and awards made by federal, provincial and non-profit agencies. Thus, some data are missing but the lists are helpful in gauging the relative lack of progress. In 1980-81 the average funding per project was \$34,715; in 1989-90, \$15,615. A very recent report (Canadian Association of University Schools of Nursing, May, 1990) compiled by O'Connor, indicated that in 1988-89, in university schools of nursing, a total of 242 projects had been funded, for \$4,490,761 or \$18,556 per project. Of the 225 projects headed up by nurse principal investigators, the total funding added up to \$3,053,639 or \$13,571 per project. Nursing academics reported that 169 projects were proceeding without any funding. Sources of funding proved to be a variety of local, provincial and federal agencies and associations.

Table 1

Funding for nursing health-related research by year, 1980-90.

Year	# Projects	Total Funding	Average/Project
1980-81	19	\$ 659,597	\$ 34,715
1981-82	15	\$ 526,990	\$ 35,132
1982-83	22	\$1,016,247	\$ 46,193
1983-84	23	\$ 549,128	\$ 23,875
1984-85	30	\$ 640,846	\$ 21,361
1985-86	39	\$ 501,840	\$ 12,867
1986-87	43	\$1,235,811	\$ 28,739
1987-88	77	\$1,457,950	\$ 18,934
1988-89	69	\$1,338,733	\$ 19,401
1989-90	78	\$1,217,984	\$ 15,615

(CNA, April 1990)

Statistics from the American nursing scene illustrate gains not yet seen in Canada. In comparisons from 1968 to 1985, American nurse researchers moved from \$2,593,000 awarded for 60 projects (with an average of \$41,000 per project) in 1968, to \$9,296,000 awarded for 90 projects (with an average of \$103,000 per project) in 1985 (CNA, April 1990 documentation). The evidence here indicates that funding per project, regardless of how the funding is spent, has increased substantially.

Do nurses receive a fair share of federally subsidized research funding? The federal government of Canada has consistently recognized the need for research in other sectors. The Social Sciences and Humanities Research Council of Canada (SSHRC) has, since 1978, distributed close to one-half billion dollars in research monies. Table 2 outlines the monies allocated to SSHRC, NSERC, MRC and NHRDP in 1988-89. In terms of federal government spending, nursing research, from various sources, does not receive even as much as the administrative and operations budgets of any of SSHRC, MRC and NSERC. As well, both MRC and NSERC have received substantial increases in their budgets. The MRC Annual Report for 1988-89 indicated that the Government had decided to provide an extra \$61 million over 5 years (1988-1992). NSERC had a \$26.2 million raise, much of it from the private sector, but still finds the total budget is not enough to provide funding for all the science and engineering research potential in Canadian universities. Thus, other disciplines have been well supported. There is no separate federal funding for nursing research.

Table 2

A comparison of the budgets of four federal funding agencies, 1988-89, as reported in the annual reports.

Funding Agency	Costs of: Grants & Scholarships	Administration	Operations	Total
SSHRC	\$ 69,260,000	\$ 1,951,000	\$5,146,000	\$75,801,200 ²
MRC	\$183,860,000	\$ 1,318,000	\$3,877,000	\$188,842,0002
NSERC	\$350,246,309	\$15,633,935	_ 1	\$365,059,191
NHRDP	-	_	_	\$ 31,000,0003

Note 1: NSERC does not break administrative costs into 2 categories as do MRC, SSHRC.

Note 2: Totals for SSHRC and MRC include a small revenue base.

Note 3: NHRDP does not issue a detailed annual report. The total for 1988-89 was a personal communication from the Department.

Overall, the status of funding has remained relatively undeveloped over at least ten years, and, in comparison with the progress of American nurse researchers and other disciplines in Canada, the appearance is more one of retrogression.

The late 1980s - some progress

In spite of the lack of research funding, nurses have made some progress which illustrates that research is valued in the profession. The CNA (March 1988) documented that in 1988, three nurses served on MRC Review Committees and seven nurses sat on NHRDP Review Committees; in the period 1983-88, 37 nurses have received NHRDP fellowships; in 1987, Faux reported that 17 teaching hospitals had employed nurse researchers; and, two provinces have established nursing research units. O'Connor (1989), reported that, over a nine-year period, "The number of funded projects in which nurses served as principal and co-investigators has increased fourfold" (p.1). In 1988 MRC and NHRDP announced a competition for development grants for nursing research. In 1989-90, \$65,833 was allocated to three individual nurse researchers. The competition will occur over 3 years, however confusion about the competition has resulted in decreased interest as is demonstrated by the number of letters of intent submitted: in 1988 - 17; in 1989 - 5. While it may seem that these are substantial gains, it is comparison data that are needed to paint a true picture. For instance, in five years, 37 nurses received NHRDP fellowships: how many fellowships from NHRDP and MRC were given to dentists, pharmacologists, dieticians and physicians in the same time period?

In summary, some progress has been made but it has not been substantial.

Conclusions about the lack of progress for research funding

Nurses are the most numerous of all health professional groups in Canada. Table 3 indicates that there is one nurse for every 125 Canadians. This fact means that nurses have a unique opportunity to observe patients in all settings, to think about our health care system and its impact, and, therefore, to do research that will enable positive changes. Why has this not been acknowledged by our governments in an age when nurses are better educated, willing to do research and wanting to influence health care decision-making responsibly? The reality is that in 1990 there are more nurses doing more projects for less money than ever before. This in an environment where, without any funded doctoral programs, research training has been mostly at the master's degree level or self-directed.

Table 3

The number of Canadians served by members of various health care disciplines.

	Health Care Discipline	Number/Population (Canada)
1.	Audiologists, Speech Pathologists	1:9,120
2.	Biomedical Engineers	1:95,509
3.	Chiropractors	1:8,497
4.	Dental Assistants	1:19,601
5.	Dental Hygienists	1:4,205
6.	Dentists	1:1,937
7.	Dieticians	1:5,217
8.	EEG Technologists	1:81,996
9.	Health Record Administrators	1:9,199
10.	Health Service Executives	1:11,687
11.	Medical Lab. Technologists	1:1,481
12.	Radiology Technologists	1:2,466
13.	Nurses	1:125
14.	Nursing Assistants	1:309
15.	Occupational Therapists	1:9,953
16.	Opticians	1:7,317
17.	Optometrists	1:10,308
18.	Orderlies	1:1,354
19.	Osteopaths	1:593,042
20.	Pharmacists	1:1,519
21.	Physicians	1:479
22.	Medical Physicists	1:194,663
23.	Physiotherapists	1:4,223
24.	Podiatrists	1:97,704
25.	Psychologists	1:3,452
26.	Public Health Inspectors	1:17,242
27.	Respiratory Technologists	1:8,858
28.	Social Workers	1:2,676
29.	Veterinarians	1:4,892

(Health and Welfare, 1988)

It has been thought in the past that mere clarification of intent about nursing research funding would be sufficient. The following quotes illustrate this view:

The boundaries between the two Councils (SSHRC, MRC) and their interfaces with NHRDP should be defined clearly in the context of

nursing research so that nurse-investigators have clear guidelines on where to send their applications for research funds and so that gaps in funding can be identified." (MRC, 1985, p.13)

Which federal granting councils are the most appropriate for the funding of research in nursing? Can the guidelines of federal granting councils be changed to clarify that the council can appropriately fund nursing research? How can the peer review committee structure be influenced and infiltrated with qualified nurse researchers to assure knowledgeable and balanced peer review of nursing grant applications?" (Ritchie, 1988, p. 258)

Beaton (1990) was much more blunt when she said: "Often, the criteria for funding implicitly if not explicitly exclude phenomena of interest to nursing. Criteria may reject research methods found useful and important for nursing science." (p. 30)

The profession has been competing for funding in a game in which nurses do not know the rules nor have they the required "expertise" (doctoral and post-doctoral training, specific methods, certain types of research). Funding agencies have not hesitated to turn down nursing proposals because of a lack of "fit". Nurses have also been trying to access monies established for social science or medical research. The more nurses receive, the less there is for social scientists and physicians. It is not an error that \$188,842,000 is called funding for *medical*, not *health care*, research. It may be more difficult to access funding established for purposes other than nursing than to request separate funding. In an era when federal funding agencies are asking for more money, suggesting that they share what they have may not be psychologically advantageous for the profession.

The CNA (April 1989) has documented that nurses constitute over 50% of health care providers, and manage over half of the 29 billion dollars spent on health in Canada; yet less than 1% of the health care research funding is allocated to nursing research. Questions must be raised about these discrepancies.

There may be a more insidious underlying reason for this serious discrepancy - discrimination against a professional group that has a different mandate, a different education and in which practitioners may employ different, yet valid, research methods. This discrimination may be compounded by the continuing sexism in Western society. When such a value system is in place, arguments and evidence about the cost savings of nursing practice in primary health care, the impact of midwives' practice on the outcome of normal births and other cost-effective and cost-efficient practices are given no credence: to acknowledge them would be to threaten dearly held values and existing systems.

The approach of the federal government has been to disenfranchise nurse researchers. The evidence clearly indicates that the level of funding has decreased as the number of nurse researchers and projects have increased, against great odds.

Working Toward a Level of Funding for the 1990s

A hard reality is facing the nursing profession. It is money that is needed for the further development of all aspects of nursing research - training of researchers, implementation of findings, conduct of studies. While some nurses advocate use of the current system, Stinson, Lamb and Thibaudeau (1990) were very clear about the need for monies to be safeguarded for nurses:

While the elite may argue that 'real' nurse researchers can compete successfully in the absence of funding programs specifically intended for nursing research, the facts to date indicate that the 'purists' are in error: research in any emerging professional discipline requires specific interventions, including the development of policies and priorities which promote rather than exclude emerging researchers. Also it must be emphasized here that the purists' point of view largely ignores the fact that one of the greatest impediments to the development of nursing research in Canada is not so much the lack of project funding for top flight researchers as the lack of support for a comprehensive infrastructure". (pp.118-119)

Two cases provide illumination: the Alberta Foundation for Nursing Research (AFNR) and the American National Centre for Nursing Research (NCNR). In both instances, governments (one provincial, one federal) allocated funds to nurses for research grants. The NCNR also provides funding for education and career development in nursing research. These bodies are for nurses and run by nurses. In both instances, there has been strong progress in the field of nursing research, with both AFNR and NCNR reporting that the quality and quantity of proposals has been dramatically increased. NCNR has also developed these research priorities, in ranked order: AIDS, low birth weight infants, long-term care, symptom management, information systems, health promotion and the effects of technology on care (NIH, 1989a). These reflect the concerns of nursing. AFNR had \$1,000,000 awarded over a five-year period and has been granted another \$1,000,000 for another five years starting in 1989. NCNR began in 1986 with \$16,193,000, and had \$23,366,000 in 1988. The Centre has projected that it will need \$72,487,000 for 1993 (NIH, 1989b). It is money targeted for nursing research that has fuelled this progress in AFNR and NCNR. Canadian nurse researchers are in a classic "catch-22" situation where they can't receive decent funding from federal agencies because they haven't "proved themselves", yet they can't prove themselves until they have enough money to conduct studies with appropriate sample sizes.

Some suggestions

How can nurses approach the federal government on this issue? Most important, the profession needs a strong lobby in Ottawa, for paid lobbyists are a reality in our political system. Lobbyists are informed individuals who know when deals are being made, who understand that Members of Parliament (MPs) require education and who gain regular access to MPs. Their sole reason for existence would be to help the progress of Canadian nursing research. They could also coordinate major lobbying events across the nation, where nurses approach their MPs and members of provincial governments over a prescribed period of time to outline the discrimination against nurses. Media campaigns could be organized at the same time. A stable federal source of funding earmarked for nursing research is essential.

A study of foundations providing funding for health care research should be conducted: it would discover to whom the money is awarded and if monies are safeguarded for nursing research. As well, have nurses applied for funding? Hospital foundations are big business today. The publication *Hospital News* devotes one full section to fundraising. Reports indicate that millions of dollars are being raised for medical technology and research. Even the Globe and Mail publication *Report on Business Magazine* featured an article in March 1990 on fundraising by "society queenpins" called "Revel with a Cause" (Maynard, 1990). Do nurses, the largest employee group in any hospital, have access to such foundation money? In each hospital, nurses must educate their foundation board members as to their needs and their rights.

The various health care societies and associations are beginning to acknowledge that nurses do research. A survey of all such agencies should be carried out to find out if they have a nursing research program, and if the donation forms specify a nursing research category. The findings of the survey could be published in *The Canadian Nurse Journal* so as to enable nurses to make informed decisions about their charitable giving. If 240,000 Canadian nurses give annually, on average, five dollars to charity, the \$1,200,000 donated would boost the profile of nursing research considerably. If those 240,000 Canadian nurses persuaded their family members and friends to support nursing research through their donations, a potential extra 1,200,000 people might give five dollars a year: an extra six million dollars would be added to the nursing research pot. The point of such a campaign would be to assert rights, not disadvantage agencies. The response to the volunteer at the front door could be, "I'm sorry, I do believe in the work your agency accomplishes but I only support those agencies which

support nursing research and indicate so on their donation receipts." Such a message, given consistently, would elicit change.

The final suggestion reflects the role that nurses themselves must play. First, nurses have to become informed about the current opportunities for research funding and tap them. The CNA, many provincial nursing associations and university research offices are excellent sources of information on research funding. University research offices, in particular, have not only the usual lists but copies of directories to foundations. Nurses must also take an active role in raising funds for themselves. Many devote time and effort to fund raising for charities, for their children's schools and for their communities; but they balk at fund raising for their own profession. This lack of investment in themselves is unfortunate and may lead non-nurses to assume that the lack of financial investment mirrors a unreadiness to commit to the profession in other ways.

With regard to research funding, the profession is in a "catch-up" position at a time when the economy is slowing and established funding bodies are asking for more money. Thus, as well as pursuing the traditional routes for funding, nurses will have to be innovative and assertive in their efforts to establish a funding base and to protect their rights to research their own practice.

Conclusion

Nurses cannot begin to work seriously on problems in health care unless they have the means to study them, to replicate research, to test theories and to prove that nursing makes a difference to the health care experience of Canadians. To deny nurse researchers adequate funding is effectively to neutralize their influence.

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RÉSUMÉ

Le financement de la recherche en sciences infirmières: un problème pour les années 1990

Le niveau de financement actuel des recherches infirmières au Canada est insuffisant pour soutenir les efforts visant à valider nos connaissances et à les faire progresser. Les données présentées dans cet article démontrent que le niveau de financement par projet a diminué depuis dix ans, et qu'au cours de la même période, ce même niveau a augmenté considérablement aux États-Unis; par ailleurs, le gouvernement fédéral subventionne officiellement la recherche dans d'autres disciplines, même si les effectifs sont plus importants en sciences infirmières que dans ces autres disciplines. L'auteur explique cette stagnation du financement par diverses raisons et conclut que les chercheurs en sciences infirmières devraient avoir accès à des sources de financement distinctes. L'auteur énumère en outre certains problèmes auxquels il y a lieu de s'attaquer.



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The School of Nursing, University of Manitoba invites applications for term and sessional appointments to teach in the undergraduate programs. DUTIES include: teaching in the areas of Physical Assessment: Legal Issues; Prevention of Illness; Health Promotion of Individuals; Facilitation of Self-Care; Clinical Nursing Practice in infants, children, adolescents, young adults, middle-aged and elderly clients; maintaining an ongoing program of research and scholarship; participating in School, University and professional activities.

QUALIFICATIONS: an earned master's degree in Nursing or closely-related discipline. Provide evidence of advanced research training and experience, experience in teaching nursing at a university, where relevant, clinical experience and demonstrated ability in establishing collegial relationships. Rank and salary will be commensurate with qualifications and experience. Registration with the Manitoba Association of Registered Nurses is required.

The University of Manitoba encourages applications from qualified women and men, including members of visible minorities, aboriginal people and persons with disabilities. The University provides smoke-free work environment. Priority consideration will be given to Canadian citizens and permanent residents.

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QUALIFICATIONS: an earned doctoral degree or substantive progress towards a doctoral degree in Nursing or a related discipline. Outstanding candidates with masters' degree in Nursing or closely-related disciplines may be considered. Provide evidence of advanced research training and the development of an ongoing research and publication program, experience in teaching nursing at a university, where relevant, clinical experience and demonstrated ability in establishing collegial relationships.

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