EMPOWERING NURSING RESEARCH AND NURSING RESEARCHERS

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First, may I offer my congratulations to the University of São Paulo of Nursing on your 50th Jubilee. Also, may I commend you for the manner in wich you are celebrating this anniversary. This international conference on *Nursing Research: A Matter of Helth* is appropriate recognition of the goals and accomplishment of your school, as well as recognition of nursing's actual and potential contribution to society.

I am highly honores to be among the distinguished panel of nurse researchers and theorists who have preceded and will follow on the program this week. They have come from various parts of the world to talk about various dimensions of nursing research. I am not in their class as renowned nurse scholars and researchers. Therefore, I may bring a different perspective and experience to these proceedings.

My *perspective* has been that nursing practice is art, science, politics, and business. My *experience*, as an academic dean and as an activist member of professional organizations, has been more in the realm of nursing politics than nursing science. Nevertheless, the two dimensions – nursing science and politics – are closely tied together. Scientific and political forces are mutually reinforcing or mutually weakening, as the case may be. Therefore, my talk this morning will be on the subject of "Empowering Nursing Research and Nursing Researchers." My premise is that while nursing science is the process of generating nursing knowledge, nursing politics is the means of generating the resources for and the recognition of nursing science (and nurse scientists) – in universities, in agencies of government, in the professional comunity, or wherever. Politics, in the purest sense, is governance. Common wisdom describes it as the art of getting things done. It is for this reason that when my particular perspective appeared in *International Nursing Review* in 1990 it was entitled "A Common Sense Approach to Nursing Research." (STYLES, 1990) I shall use slides in this representation. I apologize that they are in English – not Portuguese.

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The underlying concept to this common sense approach to nursing research is *professional empowerment through knowledge. The operational*

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definition of empowerment in this instance is the allocation of material resources, largely money and tangible benefits for the profession, for the accessibility and improvement of nursing's services to society. Please note that the quality of nursing care is implicit throughout this approach

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The seminal question derived in this manner is: *How can knowledge be produced and used by the profession to increase its ability to compete for resources?* In answer, it seems to me that at least five principles must be observed in knowledge empowerment:

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Principles of Knowledge Empowerment

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I. Knowledge, whether of a clinical or administrative nature, must be of political importance, i.e., it must have significance to decisions about the allocation of resources.

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II. Appropriate paradigms or theoretical frameworks must be used to produce politically powerful knowledge.

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III. To have political impact, knowledge must be packaged and presented in such a manner that its meaning and relevance are unmistakable and widely disseminated.

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IV. The profession must establish and maintain connections to the knowledge power brokers.

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V. Acknowledgment of the political value of knowledge must be evident in the socialization of nurses, and in priority setting by the profession.

My purpose here this morning is to toss these ideas among you for your scrutiny, elaboration, and refinement. Admittedly my perspective is largely an American perspective and only you can say to what extent it applies to your situation.

Political Significance of Knowledge

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The first principle is that empowering knowledge must be of political importance. In other words, this knowledge must have significance to decisions about the allocation of resources.

In the U.S. where prizes are given for everything from outstanding movies to outstanding science, a former U.S. Senator used to give a dishonorable award periodically to seemingly insignificant, obscure, meritless, government-funded research projects. For example, this negative award has been given (1) to the National Aeronautics and Space Administrations for spending $22,700 in search of composers to compose music for stations in outer space, (2) to the Law Enforcement Assistance Administrations for a $27,000 study on why inmates desire to escape from prison, and (3) to the Department of Commerce for spending $6000 to study whether or not smoking marijuana has a deleterious effect on scuba divers.

Obviosusly such projects do not speak well in the political process for the professions and the professionals involved. Nursing has not yet won such a demerit, but some of our projects have been of dubious value in terms of immediate or ultimate social significance; and, I think we are fortunate to have escaped such infamy.

On the other hand, there are numerous examples of highly meritorious and politically powerful knowledge about nursing. Let me mention but three illustrations, both clinical and administrative in impact, from hundreds that could be chosen.

In 1986 the federal office of Technology Assessment, in comparing the quality and cost of care provided by physicians, nurse midwives, and nurse practitioners, found that overall the quality of care was equivalent, although nurses relied less upon drug treatments and high priced technology. There were three significant findings. Specifically, it was determined that (1) nurses were able to provide about 90 percent of the primary care usually delivered by doctors; (2) the use of nurses for primary care was widely accepted by patients; and (3) the potential for reducing health care costs thereby was substancial (United States, 1986; Jacox, 1987).

A second study, *A Randomized Clinical Trial fo Early Hospital Discharge and Home Follow-up of Very-Low-Birth-Weight-Infants,* determined that early discharge of such infants with folow-up care by a nurse specilist is safe and cost effective; that early discharge (1) potentially decreases iatrogenic or medically-caused illness and hostpital acquired infections, (2) enhances paren-infant interaction, and (3) significantly reduces hospital costs for care (Brooten, et al. 1986).

A third example of powrful knowledge is the Acute Physiology and Chronic Health Evaluation (APACHE) resarch on the autcomes of intensive care on more than 5000 patientes in 13 tertiary care hospitals. Published in 1986 in *Annals of Internal Medicine,* this study found that (1) the interaction among staff and (2) the nursing education support system were two significant varialbles, of greater importance than the unit's administrative structure, or the hospital's university affiliation,or even the amount of specialized treatment used. The autcomes of care were very simply established in mortality rates (Knauss, 1986). Perhaps not since the time of Florence Nightingale's impact on mortality rates in the Crimea has the effect of nursing, in this case continuing education in nursing, been so well documented.

This same study of patients in intensive care units further stressed the importance fo staff relationships, the second significant variable. When most constructive, staff relationships, and particularly interdisciplinary doctor-nurse relationships, save lives, cut costs, and add to nurse satisfation and retention.

Data reconciling lower costs with higher or equal quality and/or greater access to care are politically powerful, reaffirming the first principle of professional empowerment through knowledge must be of political importance; it must have significance to decisions about the allocation of resources. As a result of these three studies cited, monies should flow to schools of nursing for practitioner programs, and from hospital care to home care for certain patient population, and to projects for staff development and improving working relationships among health professionals.

Appropriate Paradigms

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What types of theoretical frameworks lead to konwledge that empowers a profession in a political environment, knowledge of the type gained in these studies? This brings us to the second principle, that appropriate paradigms or theoretical frameworks or methodological approaches must be used to elicit politically powerful knowledge.

This case has been well stated in an editorial in NURSING AND HEALTH CARE by a UCSF colleague. She states:

> Modern nursing, like medicine, is based on scientific frameworks that are primarily biological in origin. Nursing also adopted individual social and psychological theories as a basis for knowledge. All of these theories have one feature in common: a focus on the individual in society to the almost complete exclusion of a focus on broader sociologial, political, and economic theories. The new imperative for nursing is to move beyond its heavy reliance on individualist frameworks and to include theoretical frameworks that examine health care systems, organizations professionals, and the society as a whole. Only with a basic understanding of the larger

issues drawn from the fields of sociology, political science, public policy, and economics, can nursing become a fullfledged player in the political arena (Harrington, 1988).

I would agrre with the author that "to be more effective in the exercise of power" nursing must achieve a balance or blend, a marriage between individualistic and systems theories. Focus on the body cell or the organ or even on the individual, to the exlusion of the aggregate and the environment, will not serve the profession well. For example, there is a substancial body of nursing literature developing in the area of wound healing. This is an important subjetct for our profession, because nurses have traditionally cared for the skin. Such research begins at the cellular level. However, succeeding stages must place those findings within an economic framework to determine the cost benefits of effective wound healing.

To gain a global view of research conducted by nurses, I scanned the *1987 International Nursing Research Conference Abstracts,* (International, 1987). Individuals were the units of analysis in the mojority of the more than 450 researches reported. The phenomena or problems studied ranged from human psychosocial stresses to physiological responses. These are, of course, highly important in improving nursing and health care. It was also apparent from this cursory view that health care systems and public policy implications could be drawn in many cases, if economic, political, and sociological frameworks were applied.

Even when we deal with an individualistic or cellular question, as is entirely appropriate and necessary, we must extrapolate its broader implications to the society as a whole. Thus, the third principle assumes its importance.

Presentation of Knowledge

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"To have impact, knowledge must be packaged and presented in such a manner that its meaning and relevance are unmistakable and widely disseminated". The sad fact about the negative award give by our U.S. Senator is that undoubtedly many of the projects had potential social import. It was just that the significance was buried so deeply in the narrow scientific abstrusity that it appeared absurd. Whatever the nature of the research, the challenge is to excite people's imagination with the findings and their implications.

I have carefully observerd that some of the best biomedical researchers in the basic or clinical sciences at our university have a certain wisdom about and talent for publicity that seems contrary to the stereotype of the mad scientist locked in his laboratory. They travel with ease back and forth from their microscopes to the campus public relations and development offices. Not only do they have a vision about the social, political, and economic implications of an obscure finding but they are able to appear in their impeccable lab coat before the television cameras or in their business suits before a private philanthropist and explain this vision in common, captivating, compelling language.

One might assume they have a sixth sense about packanging and presenting scientific data in terms that are both understandable, personal, and even intimate to the layman and the policy maker-terms that are meaningful to consumers and relevant to their expericences and concerns. Obviously such young scientists have been trained by established reserchers to put forward their research to greatest advantage, in gaining additional resources and, accordingly, personal recognition.

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Nurses, too, must be educated to do so. Otherwise, our good works will lie on dusty shelves. As is often pointed out, our research is often meaningless to practitioners of nursing. So, how must it seem to others? It is not enough that we speak to ourselves in our own language. We must communicate with and impress others-other scientists, policy-makers, the media, and the public-about the value of our knowledge. Principle number four reminds us that there are various power brokers, or powerful intermediares, in this process. Power brokers are agencies or persons who by virtue of their position are able to give to or take power from others.

Power Brokers

Knowledge is leveraged or raised to greater advantage in the scientific community through a number of soucers. Nursing must be connected to those sources, because recognition accrues to the insiders, to those who circulate in the knowledge "marketplace".

In the U.S., there are, at least, three premiere scientific power brokers. The first is the National Institutes of Health, Konwn as NIH. NHI is an agency of the federal government; it is the citadel of the biomedical sciences, encompassing 15 research institutes and a large clinical center. NIH awards annually about $ 5 billion dollars in the form of 25,000 research grants.

To my knowledge, there is nothing of the magnitude and prestige of NIH in the world. Research that has undergone its rigorous peer review process carries an impressive stamp of approval. And to serve on one of those review panels, in itself, carries a very special distintiction for a scientist. Within these institutes nurses serve increasingly on NIH peer review panels and nurse researches increasingly compete for awards as investigators or co-investigators on NIH-funded projects.

It hardly seems possible that less than ten years ago we, in nursing, were debating whether to seek our own federal research institute independent of or within NIH. The profession was very devided on the issue. In the first place there was heavy resistance from within NIH to admitting nursing to its sacred realm. In view of this resistance, there was concern within the nursing profession that we would be poorly regarded and badly treated should we be sucessful in our efforts to gain access.

Finally, after a hard fought internal and external battle, the Center for

Nursing Research was established within NIH in 1986. It was a wise decision. Not only have funds appropriated for nursing research awards increased from 5 to more than 30 milion dollars, but nurses and nursing research have become better integrated into the other institutes within NIH. Dr Ada Sue Hinshaw, the director of our center, who was to have been here this week, is an exemplary leader, one well versed in both the science and politics of nursing.

The Institute of Medicine (IOM) within the National Academy of Sciences is a second power broker for biomedical scientists. The IOM is a quasi-governamental agency along the lines of a think tank. It is made up of honored fellows who engage in special, independent studies commissioned by the government. There are close to 500 members of the IOM of whom roughly 35 are nurses.

Scientific journals are also power brokers. Among such sources, the *New England Journal of Medicine*, is certainly the most prestigious and tightly controlled publication of its kind in the U.S. and of quite high rank in the world. To have research accepted in the *Journal* is the pinnacle of recognition in the community of biomedical scientists. Nursing science is just beginning to appear in its pages. The article mentioned earlier on low birth weight infants has broken new ground for the profession in accessing this power source. We are inside a significant arbiter or judge of scientific knowledge. Now nursing must strive to raise one or more of our own professional journals to this level of public and scientific recognition.

A new power broker is developing in our country. I refer to the federal Agency for Health Care Policy and Research (AHCPR). Through this initiative, clinical pratice guidelines are being developed for widely used treatments for common, costly health problems. Because some of those problems, such as urinary incontinence and pain management, fall substantially within the nursing domain, nurses are well-represented on the multidisciplinary teams developing each set of guidelines. Thus, nursing research could be a major factor in those guidelines. This represents a striking example of the first principle, as well, that powerful research ultimately has significance to policies about the allocation of resources.

A major point in all of this is that nursing knowledge is empowered as it is accepted by multidisciplinary power brokers. Acknowledgement by the power brokers is acknowledgment by the most highly regarded in the total scientific community, not just by nursing peers, that our research findings merit special consideration. Presently medicine's stamp is too heavy upon these power sources. The context must be broadened to cover all of the health profissions. Nursing could serve as a wedge to open those doors by strengtheing its own power sources and sponsoring the best of scientists in allied fields.

Professional Priorities

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"Ackowledgment of the political value of knowledge must be evident in professional socialization and priorities," the fifth principle, may be most influential in our ability to infiltrate, tap, and develop such power sourcers.

Along with efforts to establish nursing education at the university level must come the teaching of new subjects, new values, new attitudes, new skills, new ways of thinking. Economics and political science are two pratical subject areas for the emerging nurse scientist and clinician.

A 1988 article on " Teaching Nurses the Language of the Marketplace", argues that economics should be a course requirement in nursing schools, because economics, as a discipline, provides a better understanding of the nature of our society and of the behavior of the health care market and enables us to use non-nursing arguments and perspectives to advance the goals of the profession (Mc Givern, 1988). Another nurse economist-researcher advocates a new imperative for nursing to broaden our repertoire of theoretical frameworks She states: "by developing a broader educational program and experience in public policy and the political economy of health, nurses will be better prepared to improve quality of care and access to appropriate services for individuals and families" (Harrington, 1988).

My main concern in advancing this fifth principle on socialization goes beyond formal coursework to focus upon the mentoring that occurs between nurse scientist faculty and their graduate students. The understanding of the first four principles of empowering knowledge, as I have indentified them – (1) political significance of knowledge, (2) appropriate paradigms, (3) presentation of knowledge, (4) use of power brokers – all of these principles must be conveyed in that student-faculty relationship. Do we, as nurse-scientist-mentors, transmit and exemplify these principles in interactions with students? Should we aim to instill an academic-political biculturalism in nurse scholars?

As one device, scholls and agencies employing nurse researches should set up interdisciplinary review processes, as rigorous as those conducted in NIH and with similar criteria, to critique and improve research proposals before they are submitted to funding sources. Such trials would also be good experiences for doctoral and postdoctoral scholars.

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As to the profession itself, its research priorities must reflect this same understanding about how knowledge empowers the profession. The American Nurses Association (1985) has developed, I believe, a well-balanced set of research goals and estrategies. These are:

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1. To ensure an increased supply of nurse scientists by the year 2000.

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2. To generate knowledge about the well-being and optimun functioning of human beings, the effective delivery of nursing services, exellence in nursing education, and the impact of the profession on health policy.

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3. To develop environments that support nursing inquiry, including opportunities to initiate and implement nursing investigations and access to research facilities and equipment.

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4. To disseminate the results of nursing research to clinicians, the scientific community, the general public, and health policymakers, and to increase use of the results. These four goals, and the strategies related to each, express an understanding of those principles upon which is based the empowerment of a profession through knowledge.

Since I have presented a largely American perspective with U.S. examples of means to empower research, I would like to mention one international development before closing.

The Internacional Council of Nurses is in the early stages of developing and testing an International Classification of Nursing Practice (called ICNP). The hope is to eventually incorporate this classification of nursing problems, treatments, and outcomes within the World Health Organization ICD – Internacional Classification of Diseases. Such an achievement would, I am convinced, give greater visibility and power to nursing knowledge and practice.

Further Reflection

I said earlier that I have presented this common sense approach to nursing research-centered around success in competing for resources for nursing and its services-for your further reflection and refinement. Undoubtedly it has many limitations. However, in light of the realities surrounding us in today's world, I believe it merits further debate.

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I would close with four questions for discussion:

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What kinds of nursing knowledge are/would be most valued in your country? And by whom are they most valued?
- by the government?
- by the health care system?
- by the profession?
- by the public?
- etc.

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List some researchers that have produced such knowledge.

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Have the researches been presented in such a manner as to lead to
- the increased allocation of resoucers for nursing care?
- increased recognition for the profession?

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Based upon your experiences in your country, is it possible to identify principles or guidelines about how nursing knowledge could be most empowered?

REFERENCES

INTERNATIONAL NURSING RESEARCH CONFERENCE, 1. Kansas, 1987. *Abstracts.* Kansas, American Nurse's Association, 1987

AMERICAN NURSES ASSOCIATION. *Directions for nursing research:* toward the twenty-first century. Kansas, 1985

BROOTEN, D.; KUMAR, S.; BROWN, L.; BUTTS, P.; FAINKLER, S.; BAKEWELL-SACHS, S.; GIBBONS, A.; DELIVORIA-PAPADOPOULOS, M. A randomized clinical trial of early hospital discharge and home follow-up of very-low-birth-weight infants. *New England J. Med.,* v.315, n.15, p.934-9, 1986.

HARRINGTON, C. The political economy of health: a new imperative for nursing (Editorial). *Nurs. Health Care,* v.9, n.3, p.121, 1988.

JACOX, A. The OTA report: A policy analysis. *Nurs. Outlook,* v.35, n.6, p.262-7, 1987.

KNAUSS, W. A.; DRAPER, E. A.; WAGNER, D. P.; ZIMMERMAN, J. E. An evaluation of outcome from intensive care in major medical centers. *Ann. Intern. Med.,* v. 104, n.3, p.410-8, 1986.

Mc GIVERN, D. O. Teaching nurses the language of the marketplace. *Nurs. Health Care,* v.9, n.3, p.127-30, 1988.

STYLES, M. M. A common sense approach to nursing research. *Int. Nurs. Rev.*, v. 37, n.1, p.203-6, 1990.

STYLES, M. M. The power od knowledge: the knowledge of power. (Paper presented at the Fourth Open Conference of the Workgroup of European Nurse Researchers, Jerusalem, Israel, 1988).

UNITED STATES, Congress. Office of Technology Assessment. *Nurse practitioners, physician assistants, and certified nurse-midwives:* a policy analysis. Washington, D.C., U.S. Government Printing Office, 1986. (Health Technology Case Study, 37).