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## Towards an international network of nursing research based on digital technology

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### ABSTRACT

Nursing knowledge and nursing research can now rapidly expand around the entire world but what could this represent for the concept of international cooperation in nursing research, acknowledging that cooperation would not happen automatically due to the establishing of a network of computers. This essay points out the potential of the digital technology for dissemination of a nursing knowledge which is commitment to the improvement of quality of life in the planet. The authors concluded that digital technology is one of the strategies nurses can use to make this futuristic vision a common reality.

**Key-words:** Computer communication networks – Nursing -Research

## INTRODUCTION

The XXI century has brought us important communication tools that facilitate research and knowledge dissemination without frontiers boundaries. Therefore, nursing knowledge and nursing research methods and findings can now rapidly expand around the entire world. This fact leads us to think on what could represent the concept of international cooperation in nursing research, acknowledging that cooperation would not happen automatically due to the establishing of a network of computers. Actually, for the establishment of international cooperation in nursing research it is necessary to have common goals. These goals must be ethically grounded to promote and preserve the most precious value: life.

Human development does not happen in a linear manner so does the nursing profession. At the time nursing enters the century XXI, it is experiencing different stages of professional development around the world. Despite of this, nursing has showed, worldwide, not only a common concern to caring to human beings as they respond to their health problems and life processes, but also nursing had demonstrated a development of a knowledge basis and practical experiences that support nursing as a caring human science. Therefore, in order to conceive an online international network of nursing research one needs to assume the caring nature of nursing. This would mean that nurse researchers would make all possible efforts to work with their counterparts maintaining interest, respect, and consideration for people's cultural values and beliefs. In other words, nurse researchers should value people approaches to knowledge development while searching solutions for their health care problems.

For this reason, this article points out the potencial of the digital technology, particularly

web and e-mail, for dissemination of a nursing knowledge which is commitment to the peace process, world development, and improvement of quality of life in the planet.

*International network of nursing research based on digital technology: let's share a common vision!*

In the beginning of the century XXI, the worldwide population is suffering with a diversity of wars, and is expecting a major war that could engulf all of us in a turmoil of destruction. Many external forces are effecting nursing around the world. Among those factors are demographic changes, cultural diversity, social movements regarding promotion of health and well-being, feminism, human rights, and ecological sensitization. In such context we need to think about a variety of human responses, that could be identified by means of a nursing diagnosis, which would demand creative and innovative nursing interventions. Such interventions would have well being and health as outcomes, and should happen under a framework that, at least, would value solidarity, equity, and peace.

To be part of an international network of nursing research, we have been sharing our experiences publishing scientific books and journals. But a concern that we have is that in Brazil each edition of a nursing scientific journal produces only 700 printed copies. Despite of the dozen nursing journals and their amount of copies, we can reach directly almost 1% of the total population of Brazilian nurses composed of approximately 90,000. However, is expected that 7% of the Brazilian population (170 million) has access to internet or web-mail including nurses. Although there is a strong difference of internet density between high income countries and developing countries the Council on Health Research for Development - COHRED (2002)

considers the digital and information revolution an important opportunity for developing countries to become part of the global economy.

Therefore, in order to share our experiences, learning from each other our best practices and building nursing evidences in a fast and extensive way, we have to consider the possibilities of utilizing a variety of technological and scientific advances at hand which can have a strong impact on nursing practice. This is the rational for the establishment of a world computer network based on digital technology.

In Brazil, we are working hard to bring into our practice the scientific and technological innovations in order to both generate, produce, disseminate, and immediately transfer nursing knowledge. However, we want to emphasize that such innovations should be committed with world peace and maintenance of ethical attitudes such as respect for humankind, solidarity among all nations.

Nowadays, in Brazil, we have two scientific nursing journals and one newsletter that are entirely based on web and electronic communication. The journals are (a) Revista Eletrônica de Enfermagem ([www.fen.ufg.br](http://www.fen.ufg.br)) and (b) Online Brazilian Journal of Nursing ([www.uff.br/nepae/objnursing.htm](http://www.uff.br/nepae/objnursing.htm)). The electronic newsletter, NEPAE-NESEN Bulletim ([www.uff.br/nepae/boletim.htm](http://www.uff.br/nepae/boletim.htm)) reaches more than 1,000 e-mails biweekly. It passes along to nurses, undergraduates and graduates students, policy makers, and organizations, news regarding the profession, calendar of events, and also makes available health knowledge.

On this same line, we think that the creation and implementation of a major international network of nursing research based on digital technology would make possible the exchange of information that would lead us to establish and validate diagnoses, interventions and outcomes while caring for human beings. This

implies to consider that they respond in a global manner to illness, disease, and health, according to the cultural diversity of the nations they belong to. The International Council of Nursing (ICN), since 1989, is leading the International Classification of Nursing Practice (ICNP) project (Cruz, 2002). The process of validation of nursing diagnoses, interventions, and outcomes utilize the electronic mail as a communication strategy between the nurses reviewers. But this is not enough. The dimension of this project demands a digital workspace technology which include communicating on-line through the use of a variety of means. Among these are: e-mail, software for electronic newsletters, web-conferencing, software for project management (search engines and databases) and team collaboration. The information must be freely accessible both at websites and webportals, and/or by electronic publishing.

It is important to point out that a relevant step in this process is the creation of a demand, defined by COHRED (2000) as the potential users of research findings such as nurses, faculty, managers. It is assumed that these people are in favorable positions to utilize and integrate research into practice. Some of us could argue that this proposal is somewhat naive since it does not take into account that knowledge is a product and therefore it has a specific value in the market place. Those readers would be right in presenting such an argument. This same argument could favor us since we perceive research, in our proposal, as a compelling force that brings political influence into the nursing profession. On the other hand a rigid hierarchical structure utilized to explain the political and economic power, could allow us to understand why the world is facing so many wars and inequity. The model which opposes the hierarchical model of power is that of a network: a network of nursing knowledge management,

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a network of political power, a world network of scholars. This would mean to act locally while thinking globally. In order to live fully in the world we need to belong to it, to live in it without fear, without hunger, without ignorance, without disease. We have also to develop the capacity to recognize and use evidence (information that has been validated upon standards) for a particular purpose to be successful in our efforts to make the world livable.

More than knowledge transfer, we consider that the major purpose of an international network of nursing research based on digital technology is the knowledge management which is a variety of activities to improve knowledge utilization. The interactions between collaborators could be a strategy for validation of nursing knowledge related to those aspects that are considered most important and that reach consensus for nurses around the world. Such an effort is necessary to develop nursing as a profession around the world but primarily to identify scientific evidences regarding nursing diagnoses, interventions, outcomes, and other aspects related to the profession. For this reason, we need to contact a diversity of cultural groups of nurse researchers that are able to utilize the internet as a means to develop research studies to provide a reliable scientific basis to the profession. Such studies could be multiple centers; that is developed at the same time in different regions by utilizing the same research design.

Stevens (2000), in a quite recent editorial, questioned whether nursing was or not aware on the convergence among health and science. She also anticipated the advantageous possibility that the profession could have on this convergent movement due to the secular contribution nursing has given to the resolution of health problems. This same author (Stevens, 2000) proposes that knowledge synthesis is the

essence of a new technology transfer paradigm that would link a given evidence of a research data to a similar evidence founded in clinical practice. In such scenery a nurse would perform a role of a knowledge broker.

Humanity is tracing its trajectory in the universe through blood, sweat and tears. Since its very beginning as professional nurses have been present by alleviating suffering and promoting clients' comfort and well being. Thus, a technology based both on virtual communication network and on scientific evidence has the potential of making the work of diagnosing and treating human responses to health and illness more productive, more effective, more rapid, and even easier ... and hopefully better paid.

We believe that we are reaching a crossroad between science and health. For this we would have to choose a new route, one that would guarantee a convergence grounded on solidarity, respect, trust in partnership, and responsibility for promotion of better living while caring for self and others in the planet. Actually, chance of making mistakes is diminished whenever option is towards life and living.

## FINAL COMMENTS

International cooperation in nursing can perform a new role throughout the implementation of an international network on nursing research grounded on the web. This is now possible due to the popularization of internet and other digital technologies.

At the same time that an international network of nursing research promotes the production, management, transference, and utilization of professional knowledge it gives more visibility and political power to the profession. In addition, it should enhance

life values by bringing into nursing practice the professional commitment of advocating health and well being of humanity - that which constitutes its primary client.

Therefore, a research paradigm for this new millenium should include the concept of solidarity among people and nations. And also the establishment of a common framework based on such values would help us to value and synthesize existing knowledge, and to apply it to clinical practice in order to bring new solutions to the existing problems. Digital technology is one of the strategies nurses can use to make this futuristic vision a common reality.

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