

## Nursing Action for the Climate Change: A Systemic Review

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### ABSTRACT

**Background:** Global climate change has had and will have considerable effects on human health. Nursing must become more centrally involved in mitigation, reducing the acidity and response efforts of the problem.

**Aim:** The presentation based on international literature review, of a framework for nursing action on climate change.

**Data Sources:** Method was used is to search electronic databases (MEDLINE, CINAHL) for a review of international literature until 2009 and became selection of books, articles and studies from libraries.

**Results:** Given the climate change, developed a working framework for serious professional thinking and action on community nursing. Like many other professions, so the nursing world should now raise the question of how it could contribute, and that could perhaps be better focused individual and collective efforts. The four main components of the framework for action are: the usual tactics, to maximize the skills, the right of priority sites and public grants.

**Conclusions:** The nursing should be linked closely with other professions and sectors in order to maximize national and international efforts to mitigate and combat climate change. The profession's response to climate change should be as varied as the sector itself, and from all countries.

**Key Words:** Climate change, nurses, nursing action, environment.

### Introduction

No single policy, government, agency, industry or group of people is ever going to reverse global climate change, or even begin to address its considerable effects. Such is the enormity, scope and advanced stage of the emergency, only a concerted effort involving unified political action coupled with diverse responses from many peoples and sectors around the world, has any real hope of succeeding.

(United Nations Environment Programme 2001)

Developing a working framework for future professional activity, (Lewis S. 2009) are four associated categories through which the international nursing could perhaps meet a) common tactics , b) maximizing specialties , c) Prioritizing places , d) public studies. (Figure one)

### Results

#### 1.1 Common tactics

All four of the above categories involve tactical thinking and action on climate change.

However, the specific tactics that might be used by nurses on a frequent basis deserve dedicated attention. Three types of these tactics can be identified (Figure two).

One way in which nurses and other health professionals can influence positive change is by undertaking environmentally friendly activities. This activity could range from the actions of individuals, to the actions of entire nursing workplaces and workforces. (Neira M, Bertollini R et al 2008 , Frumklin H, McMichael AJ 2008) Another way that nurses might influence climate change, is by providing professional advice to patients and the public about activities

that are healthy and environmentally-friendly, or by highlighting those activities likely to be detrimental to health and the environment. (Neira M, Bertollini R et al 2008 , Frumklin H, McMichael AJ 2008 , Canadian Nurses Association 2008 , McMichael 2008)

They might explain how consuming less animal produce is beneficial to cardiovascular health whilst, at an industry level it potentially reduces methane and carbon emissions in the production and transportation of such food.

Some argue that behavior modification (acting in an environmentally friendly way) is more effective at making society feel that it is making a significant contribution to combating climate change than actually effecting concrete change. As a result, irrespective of what individuals and

groups might do by their own accord, there is a need for governments to reduce carbon discharge directly through policy change and regulation. At the same time, they also need to facilitate a significant shift towards renewable energy to replace excessive consumption of oil, coal, and natural gas. (Lewis S. 2009)

With this in mind, a third tactic involves nurses and other health professionals working collectively to encourage policy change across institutional, national and international levels. (Canadian Nurses Association 2008 , McMichael 2008 )

Nurses have always enjoyed recognition by officialdom and have held the attention,

support and respect of citizens, that makes them well placed to intervene in these ways. They possess power inside and outside the political process and, although it might not always seem the case, exercise more influence than many other sectors or groups.

Underpinning nurses participation in all three tactics outlined above are the perceived 'natural' and 'caring' features of the profession, and the personal connections and communications nurses have to individuals and their wellbeing. This makes them well placed to act as advocates and formulate strong arguments on health and the environment.

### 1.2 Maximizing specialties

The substantial and potentially calamitous problem of global climate change demands unified attention not only from health sectors and professions as wholes (Kein ME 2008) but also from all their internal specialties and fields. Each may tailor its responses to make a unique contribution through its core services. (Lewis S. 2009) In nursing, five types of specialty or sub-field can be identified (figure three).

Nursing's response to climate change must first reflect its specialization in, and contribution, to specific sectors of overall health systems whether these be primary health care, community health, public health, or others, nursing locates differently

in each, has different interpersonal interactions, power bases and can hence do different things. One could imagine, for example, school nurses discussing with children on environment and health.

Second, nursing has established specialist interests in specific client and demographic groups and possesses knowledge about their and their families specialist needs and circumstances. This expertise should be used to ensure that the circumstances of different groups are addressed and information is dispersed most widely.

A third division in nursing is based on distinct health conditions and types of medicine (for example palliative care, oncology, cardiology, intensive care).

Fourth, nursing is an incredibly diverse job category both in terms of breadth and levels of seniority. Whilst a head nurse specialist might educate ward staff on environmentally-friendly practice, a chief administrator/director, might adjust unit-level spending to address a particular environmental issue or might lead

institutional scale environment initiatives and also be involved at the level of local government and planning.

In sum, nursing must closely link with other professions and sectors to maximize national and international mitigation and response efforts on climate change. Nursing however is far from a single uniform profession. The profession's response to climate change must be as diverse as the sector itself, and come from all quarters. (Kein ME 2008)

### 1.3 Prioritizing places

Climate-related health problems exist and impact differently around the globe. This is

critical geographical contexts which determine the nature of the professional response. (Lewis S. 2009, St Louis ME, Hess JJ 2008 , Hess JJ et al 2008)

Although it is understandable that nurses will naturally focus the majority of their

environmental efforts in their own countries, there is still a need to recognize that environmental change will be most aggressively felt in Southern Africa. (Lewis S. 2009) Greater elaboration on the complexity of the situation on this continent shows how one health problem roles into another:

Climate change in the future will intensify drought in Africa, reducing agricultural productivity there and causing famine. In addition to the direct health impacts of this on morbidity and mortality, a lack of food will exacerbate pre-existing health problems. For example, HIV/AIDS research tells us that that successful antiretroviral treatment depends on the consumption of nutritious food. (Anabwani G, Navario P 2005) People in these areas will therefore face even greater challenges and threats to their health.

Another crisis facing Africa is that of environmental refugees following drought and famine. There lies the potential for the movement of millions of people, particularly out of Southern Africa northwards. (McMichael 2008)

The health of these people will undoubtedly suffer further during their migration, and increase the incidence of disease. In the regions to which they move, their presence will increase pressure on already inadequate and under-funded health systems. (Lewis S. 2009) Migration however, is not exclusively a human activity.

More generally, beyond Africa, place needs to be recognized as a fundamental and important consideration. Issues arise for example as to how climate change impacts health differently in different neighborhoods, cities, towns, rural localities, natural regions and politically defined areas. A far greater geographical awareness must drive place-specific professional responses. (Hess JJ et al 2008 , Younger M et al 2008)

### 1.4 Public Studies

Nursing requires a dedicated field of research to support its environmental activity. In this endeavor, two issues come to the fore. The first regards scope of methods and perspectives. It is widely acknowledged that nurses need to base their decision- making on the best available published

evidence. Just as this is true for familiar clinical decisions and contexts, the same holds for decisions made in response to climate change. (Lewis S. 2009)

Whilst hard science can mount compelling arguments to prove the reality of climate change and how it might impact on health, one must also remember that beyond the scientific measurement and explanation of such phenomenon, climate change has deep social complexity meaning that it has social causes, effects and solutions. (Haines A 2008, Ebi KL, Semenza JC 2008)

The second issue regards the politics of research. Some social scientists have recently argued that their disciplines have become 'theory obsessed', ever more obscured from everyday life in the creation of specialized knowledge, and have thus allowed a gap to grow between inquiry and the big issues of the day. (Burawoy M 2005, Murphy AB 2006)

Moreover, scholars also agree the quest for increasing depth and complexity of analysis has been paralleled by the emergence of an academic performance culture whereby the university has become a company with private sector management styles, and academics have become obsessed

with and/or required to engage with corporate processes and procedures. This leaves little time for building activities and interests that would be perceived to lie outside' the formally assessed features of an academic job.

The original passion for social justice, economic equality, human rights sustainable development, political freedom or simply a better world, that drew us to sociology is channeled into the pursuit of academic credentials. Progress becomes a battery of disciplinary techniques, standardized courses, validated reading lists, bureaucratic rankings, intensive examinations, literature reviews, tailored dissertations, refereed publications, the all-mighty CV, the job search, the tenure file. (Burawoy M 2005)

In the face of these developments, researchers might join with political action or otherwise make their research more accessible to a wider audience. This might involve, for example, occasional changes to a simple and open writing style, the publication of research in a wider-range of venues including the internet and other popular media forms, and public talks, debates and dialogues.

## Conclusions

Nursing might not have lost touch with public issues in the same way as some social sciences might have, it might learn from the public social science debate. In the face of climate change, it is time for nursing research to take a stand, to make and popularize strong convictions on the subject.

The nursing should be linked closely with other professions and sectors of act to maximize the national and international efforts for mitigation and combat climate change. The profession's response to climate change should be as varied as the sector, and come from all over the world.

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**Table One : Four categories of nursing action on climate change (Lewis and Andrews, 2009)**

Category	Further Explanation
Common Tactics	What nurses can do to influence public behavior and political action
Maximizing Specialties	The need for different nursing specialties to address specific climate issues
Prioritizing Places	The need to recognize differing circumstances and needs around the globe
Public Scholarship	The need to adjust the nature and focus of nursing research

**Table Two: Types of common nursing tactics (Lewis and Andrews, 2009)**

Tactic	Elaboration
Leading by example	Encouraging similar behavior
Giving Advice	At a practice and sector level
Political Action	From lobbying to direct action

**Table Three : The different types of nursing specialties**

Type of Specialty	Examples
Sector focused	primary health care, community nursing, public health nursing
Client focused	gerontology, pediatrics, mental health care
Body focused	palliative care, oncology, cardiology, intensive care
	Jobs and roles nurse practitioners, clinical nurse specialists, educators , advanced practice nurses
Specialist empirical and theoretical interests	bio-ethics, policy creation, medical devises, risk, knowledge translation