Nurses and Tobacco Control: An Intersection of Research and Health Policy

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Objectives

- Describe the evolution and intersection of an international program of research in lung cancer and tobacco control as a model for changing nursing practice and health care policy
Objectives

- Highlight strategies that made this possible
  - Establishing expertise
  - Networking with leaders
  - Having persistence & Patience
  - Seizing opportunities
Why should nurses care about tobacco policy?

...nearly 6 million people each year.

22% of global cancer deaths, 71% of all lung cancer deaths.

• 10% of cardiovascular disease deaths

About 90% of all deaths from chronic obstructive lung diseases and 42% of all chronic respiratory disease are attributable to cigarette smoking.

Reducing tobacco is critical to reducing unnecessary death and misery worldwide.

- 8 million annual deaths projected by 2030
- 100 million deaths in 20th century
- 900 million deaths projected for the 21st century
  - 70% in developing countries

WHO Global Tobacco Report, 2008
Historical perspective:
Lung cancer in a global context

• Rare disease in early 20\textsuperscript{th} century: tobacco use associated with 70-90\% of cases

• Lung cancer
  – 13\% of all cancer cases
  – 20\% of all cancer deaths
  – #1 cause of cancer death for men & women
  – 1.6 million people died of lung cancer worldwide

\textit{Ferlay, IARC CancerBase No. 11}
Establishing Expertise:
Lung Cancer Symptoms & Quality of Life

• Dissertation: Focus on QOL of older adults with lung cancer (Sarna, 1993)
  – Did not collect data on tobacco use
• Secondary analysis of McCorkle lung cancer data base (Sarna et al., 1993)
  – Tobacco use predicted weight loss
Lung Cancer Survivors
Symptoms & QOL

- Disease-free lung cancer survivors, n=142, >5 year, NSCLC (Sarna et al. 2002, 2004; Evangelista et al., 2003)
  - 40% smoked at Dx, 13% current smokers, 28% exposed to second-hand smoke
  - Tobacco affected physical symptoms & pulmonary function
  - Smoking: a predictor of poor health perceptions
Lung Cancer Survivors & QOL

• Qualitative study, n = 29, (Maliski et al., 2003)
  – Positive and negative aspects of survival & importance of depressed mood
    • Existential themes: A changed life
      – Appreciation for life
      – Los of normality
    • Health & self-care
      – Quitting smoking
      – Eating better and exercise
Women & Lung Cancer: Historical Context

1964: limited data on women in 1st SG Report

1976: NHS

1980: 1st SG report on women & tobacco

1986: female lung cancer cases surpasses breast cancer
Women with Lung Cancer

• QOL of women and lung cancer, n = 69 (Sarna, 1993; Sarna, 1995)
  – Symptom distress related to QOL
  – Tobacco as a variable affecting cough

• Multisite study of QOL of 217 women with lung cancer (Sarna et al., 2010)
  – 8% current smokers
  – 66% had comorbid disease
  – Depressed mood, dyspnea associated with disruptions in Physical & Emotional QOL
Women with Lung Cancer (continued)

- Symptom clusters (Brown et al., 2011)
  - 196 women, 6m-5 yrs post op
  - Most >3 symptoms,
  - 5 symptom cluster: fatigue, shortness of breath*, anorexia, cough, pain
    - Symptom that affected by tobacco use
Women with lung cancer & family members (n = 51)

• QOL and health status (Sarna et al., 2006):
  – 18% family members current smokers
  – Compromised health status with tobacco-related conditions (e.g. 22% had prior heart attack) that affected QOL
Tobacco Use in Women with Lung Cancer (n = 230)

• 87% ever smokers
• 37% smoking at diagnosis (Cooley et al., 2007)
  – Only 1/3 of smokers received assistance in quitting
  – Younger age, household member who smoked (21%), and depressed mood associated with continued smoking
Tobacco Cessation Interventions by Oncology Nurses

- 1996, 1st Clinical Practice Guideline
- National survey of Oncology Nursing Society members
  - Few intervened (Sarna et al., 2000)
  - Smoking affected attitudes and interventions (Sarna et al., 2001)
- National survey of tobacco in nursing education (Wewers et al., 2004)
  - Limited content on interventions
Nursing research & tobacco

• 50 year review of articles (n = 1,705) in *Nursing Research* (Sarna & Lillington, 2002)

• only 40 data-based articles
  – 18 intervention studies

• First mention about smoking: methods
  – Taking an oral temperature & controlling for smoking (Sellers & Yoder, 1961)
Tobacco & Oncology

• Limited inclusion of tobacco use in research a shared interdisciplinary concern
  – Gritz et al. “Smoking the missing drug interaction in oncology clinical trials” 2005

• Review of interventions in an oncology setting (Cooley et al., 2009)
  – Half of the 19 studies in oncology settings tested the efficacy of nurse-delivered interventions
Smoking Cessation & Benefits of Quitting: Reduced Risk of Death

- Prospective study of 34,439 male British doctors
- Mortality was monitored for 50 years (1951–2001)

On average, cigarette smokers die approximately 14 years younger than do nonsmokers.

Among those who continue smoking, at least half will die due to a tobacco-related disease.

Quitting smoking: Immediate & long term health benefits

Time Since Quit Date

- **Circulation improves, walking becomes easier**
- **Lung function increases up to 30%**
- **Excess risk of CHD decreases to half that of a continuing smoker**
- **Lung cancer death rate drops to half that of a continuing smoker**
- **Risk of cancer of mouth, throat, esophagus, bladder, kidney, pancreas decrease**
- **Risk of CHD is similar to that of people who have never smoked**
- **Risk of stroke is reduced to that of people who have never smoked**
- **Lung cilia regain normal function**
- **Ability to clear lungs of mucus increases**
- **Coughing, fatigue, shortness of breath decrease**

- **2 weeks to 3 months**
- **1 to 9 months**
- **1 year**
- **5 years**
- **10 years**
- **after 15 years**
Best practices: NURSES CAN MAKE a DIFFERENCE

Nursing intervention for smoking cessation vs. usual care

Compared to smokers who receive usual care, smokers who receive assistance from a nurse have a 28% greater probability of successfully quitting for 5 or more months.

Nursing interest in tobacco control and in treating tobacco dependence
Strategic Meeting to Change Practice: Eliminating Barriers
(After a “no show” at our 1999, ICN presentation & presentation at world Conference on Tobacco Or Health)

- Smoking among nurses
- Limited
  - Knowledge & skills
  - Leadership
- Limited nursing research

Nursing and Tobacco Control Summit, August 3, 2001
The Robert Wood Johnson Foundation
Smoking among healthcare providers is a health risk and affects their interventions with patients who smoke

1947

Sarna & Bialous, 2012
Nurses contributed to awareness of the devastation of tobacco use on women: Analysis of the US Nurses’ Health Study

Figure 1. 1976-2000 Mortality rates by never, former, and current smokers: NHS

(Sarna et al., Nursing Research, 2008)
Tobacco Free Nurses: 2003
(Sarna et al., 2006)

• 1st US campaign directed at decreasing smoking among nurses
• Aimed to increase
  – awareness of tobacco by nursing organizations
  – nursing research
  – educational resources
Our secret weapon against smoking?

Each other.

Tobacco Free Nurses is a resource for all nurses, especially nurses who want to help their patients quit smoking and nurses who want to quit themselves. We are nurses who want to benefit nurses and patients, and promote a tobacco-free society. Please visit our website or call for further information.

TFN media materials & website

Media Award from the American Academy of Nurses
Tobacco Free Nurses: 2003

• Created Nurses QuitNet: over 2200 nurses registered to get smoking cessation support
• Reached over 2 million nurses through paid & in-kind advertising in top nursing journals and newsletters
• Reached over 500,000 nurses through a national meeting of nursing organizations
Tobacco Free Nurses: 2003

- Encouraged over 500,000 nursing students to quit smoking
- Developed a pocket guide to support evidence-based interventions with the Agency for Health Care Quality & Research
- Monitored smoking prevalence among nurses: Nurses’ Health Study and the Current Population Survey
TFN selected by WHO as an exemplar for healthcare organizations for World No Tobacco Day, 2005
2014, 50 years since the 1964 Surgeon General Report on Smoking & Health

Sarna et al., Nicotine & Tob Res. 12:1167-71; Sarna et al., JAMA, 2014
Addressing Nursing Leadership
1st National Conference on Nursing Research and Tobacco Cessation: 2006

• Setting a research agenda
• Enhancing mutual collaborations
• Building science

Funding AHRQ & RWJF
Growing Nursing Research: Opportunities for International Collaboration

Sarna, Bialous, Chan, Hollen & O’Connell. (2012). Making a difference: Nursing scholarship and leadership in tobacco control: Nursing Outlook, Jan 2013

Sarna, L & Bialous, SA. (Volume Editors) New York, NY: Springer
Addressing nurses’ limited knowledge & skills
HELPING SMOKERS QUIT (HSQ)

- HSQ, a web-based educational program, tool kit, web-resources
  - Evaluated nurses’ cessation interventions with patients in 30 hospitals in 3 states.

Pocket Guide

*Sarna et al., Research in Nursing & Health, 2012; Sarna et al. Nursing Research, 2012*
Clinical Practice Guideline
Helping Smokers Quit:
A Guide for Clinicians

The 5 A’s

- Ask
- Advise
- Assess
- Assist
- Arrange

Ask about tobacco use at every visit.

Implement a system in your clinic that ensures tobacco-use status is obtained and recorded at each patient visit.

2013-2014, Nurses Referral to the Quitline Helping Smokers Quit (KY & LA) 
Updated website

8 hospitals, 4 in each state
Extending research to international sites
Survey of 242 Schools Of Nursing about tobacco control content in the curriculum
China, Hong Kong, Japan, Korea, Philippines

Engaging nursing leaders in tobacco control in Asia

UICC, Shenzen, China, 2010
International Society of Nurses in Cancer Care
Expanding capacity in other countries
>2000 nurses in China

• Collaboration with International Society of Nurses in Cancer Care (ISNCC)
  – nurses in Beijing and Anhui

• Test the feasibility of
  – web-based learning, data collection via online survey

• Micro-site of resources on ISNCC website

Funding: Pfizer Medical Education Grant
中国注册护士～帮助吸烟者戒烟（CRN-HSQ）
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Building Nursing Leaders in Tobacco Control in the Czech Republic: Evaluating the impact on nursing practice

ISNCC workshop
September, 2012, Prague,

(Sarna et al., 2014)
Building Nursing Leaders in Eastern Europe: Helping Smokers Quit
Poland & Czech Republic: ISNCC

Warsaw, July 2013, Bristol Meyers-Squibb: Bridging Cancer Care
Eastern Europe Nurses’ Centre of Excellence for Tobacco Control: ISNCC

- Czech Republic
- Slovenia
- Slovakia
- Romania
- Hungary

Planning meeting,
April, 2014, Czech Republic
Bristol Meyers-Squibb:
Bridging Cancer Care
Opportunities to Impact Health Policies
Nursing Organizations

• On behalf of the Oncology Nursing Society
  – ONS Position on Nursing Leadership in Global and Domestic Tobacco Control
  – Providing Expert Testimony
Opportunities to Impact Health Policies
Nursing Organizations

• ANA/ICN/ISNCC
  – Articulate Nurses’ role in tobacco control

• American Academy of Nursing: Tobacco Task Force
  – Policy Brief (Sarna et al., 2013)
  – Resolution for smoke-free schools of nursing, 2013
Interdisciplinary Organizations: Ensuring that nursing was represented

- Joint Commission
  - Treatment for tobacco as quality indicator
- National Cancer Institute
  - Inclusion of tobacco status in clinical trials
- IOM: National Cancer Policy Forum
- UICC: nurses’ role in tobacco control
- World Health Organization
  - Nurses’ role in NCDs
Seizing Opportunities
Reframing Tobacco Control
Risk Factor for Noncommunicable Diseases

• NCDs (cancer, cardiovascular disease, respiratory diseases, and diabetes)

• NCD Risk Factors:
  – Tobacco use*, insufficient physical activity, harmful use of alcohol and unhealthy diets
  – * The only risk factor that cuts across all 4 NCDs

UN High Level meeting, 2011
WHO Global Forum for Government Chief Nursing and Midwifery Officers
Fourth ICN Triad Meeting
May, 2012, Geneva
Representing 19 million nurses and midwives
Reaching out to
Global Nursing Leaders, May, 2012
To strengthen the role of nurses in NCDs

- Global Chief Nursing & Midwifery Officer Meeting
- ICN Triad representing nursing organizations from 74 countries
Making Policy Happen at the ICN Triad
Geneva, May, 2012

S Bialous, M Nkowane, J Oulton, L Sarna
Who Monograph on Nurses’ Role in NCDs
(Sarna & Bialous, 2012)

"Nursing leadership is imperative in supporting efforts to expand the capacity for nurses and midwives to effectively contribute to addressing NCDs”

Triad Communiqué
Interdisciplinary opportunities for influencing practice in oncology

- Tobacco Dependence toolkit for ASCO
- NCI Conference for Comprehensive Cancer Centers, 2009
- NCI-AACR Tobacco Use Assessment Task Force, 2013-14
  - To help advance science and improve survival and quality of care by incorporating tobacco assessment information
Think Global: Act Local
Chair of the UCLA Tobacco-Free Policy Task Force, 2012–2014
Healthy Campus Initiative

http://healthy.ucla.edu
UCLA went tobacco-free on Earth Day, April 22, 2013, Earth Day

Policy Impacting > 74,000 students, faculty & staff, & >100,000 visitors
UCLA Policy launch
Bruin Plaza April 22, 2013
Attack of the Smoke

http://vimeo.com/64511621
Conclusion

• Over 17 million nurses worldwide have great power to influence & create health policy
  – Establish expertise
  – Network with nursing & interdisciplinary leaders
  – Have persistence & patience
  – Seize opportunities