New Models for Elevating the Practice and Status of Community-Based Nursing Across the Spectrum of Cancer Care in Central and Eastern Europe: a review of five years of the Bristol-Myers Squibb Foundation's Bridging Cancer Care initiative

Supported by a grant from the Bristol-Myers Squibb Foundation
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*a review of five years of the Bristol-Myers Squibb Foundation’s Bridging Cancer Care initiative*

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Published as Supplement 2 to European Journal of Oncology Nursing, Volume 18, 2014
A B S T R A C T

Purpose: This supplement comprises an evaluation of Bridging Cancer Care, an initiative of the Bristol-Myers Squibb Foundation first conceived in 2007, addressing disparities in cancer care between Central and Eastern Europe and Western Europe. The strategic focus was refined in 2010 to put particular emphasis on capacity building of nurses in terms of education, training and empowerment.

Methods: The evaluation was based on review of data and information from the program’s monitoring and evaluation framework and from biannual reports submitted by grantees to the Bristol-Myers Squibb Foundation. Eleven of the grantees were selected to develop case studies, which illustrate a) the role of nurses in tobacco cessation, b) expansion of the scope of practice for general practice nurses in health promotion, prevention and early detection of cancer, c) capacity building for nurses in contemporary models of cancer care, care navigation and psychosocial support and d) establishment of nurse training programs in palliative care in Central and Eastern Europe.

Results: Between 2010 and 2013, 22 grants were awarded in Russia, Poland, Czech Republic, Hungary and Romania. The evaluation characterized the program’s impact in terms of improved health equity, health outcomes, capacity building of nurses and public awareness about cancer. With regard to health equity, all projects targeted disproportionately affected populations (children, poor, rural, ethnic) among whom 35,493 individuals were reached either through cancer screening or community and clinical care. In relation to capacity building, overall 5724 healthcare workers, primarily nurses, received training in various aspects of cancer care, while more than 50,000 patients and more than 470,000 members of the general public were reached through educational initiatives. Most of the programs have been sustained beyond Bristol-Myers Squibb Foundation funding.

Conclusion: The positive results were achieved predominantly through greater nurse empowerment, supported by the development of 17 different, customized and nurse-focused curricula. Such training can increase nurses’ knowledge and skills as demonstrated by examination testing and evaluation of nurses in the workplace. Several projects also resulted in enhanced nurse leadership attributes and eleven lead to positive changes in models of clinical or community care involving nurses. In eight cases, these changes were subsequently embodied in new health policies.

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Introduction

The Bristol-Myers Squibb Foundation

Mission and vision

The mission of the Bristol-Myers Squibb Foundation is to promote health equity and improve the health outcomes of populations disproportionately affected by serious diseases and conditions, by strengthening community-based health care worker capacity, integrating medical care and community-based
Commitment to corporate social responsibility has remained consistently strong since the Bristol-Myers Fund—now the Bristol-Myers Squibb Foundation—was established in 1955. Since then, the Foundation has invested in a broad range of programs that reflect its values and serve the needs of society. Over time the mission has evolved in line with the Bristol-Myers Squibb Company’s therapeutic areas of expertise, the Foundation’s own growing experience and with changing global health priorities. In particular, the flagship philanthropic, SECURE THE FUTURE® program was launched in 1999 to address the HIV/AIDS epidemic devastating Sub-Saharan Africa. It is distinguished by its promotion of community support for patients, especially children, affected by HIV/AIDS and its social consequences and by integration of that support with the best medical solutions for the disease in resource-limited settings. The success of SECURE THE FUTURE® has had a formative effect on the current mission of the Foundation.

Foundation programs promoting health equity
SECURE THE FUTURE®. Over the last 15 years, SECURE THE FUTURE® has provided funding of more than $160 million for both medical and community-based programs in 22 African countries. Lessons learned from this grant program will help to inform a new community-based care program for lung cancer patients in the South East United States starting in 2014.
Delivering hope. This program takes a holistic approach to hepatitis B and C in terms of awareness, prevention and care. Since 2002, Delivering Hope™ has donated more than U.S. $9.7 million to 39 projects in China and India, targeting the hardest-hit and greatest at-risk populations (children, blood donors and health care professionals).

Mental health & well-being. Initially focused on building community support for mentally ill patients in underserved minority and rural populations, this program was refocused in 2011 to address the needs of returning U.S. military veterans and their families.

Bridging Cancer Care

Strategy of the Bristol-Myers Squibb Foundation’s Bridging Cancer Care initiative in CEE

Bridging Cancer Care is an initiative of the Foundation first conceived in 2007, with the principal objective of investigating and determining effective means of addressing disparities in cancer care and clinical outcomes between Central and Eastern Europe (CEE) and Western Europe. Cancer is the second most common cause of death in Europe and remains a significant public health
There are currently 3 million new cancer cases and 1.7 million deaths from cancer in the region each year (Ferlay et al., 2007). Overall the incidence to mortality ratios in Eastern Europe tend to be less favorable than those in northern Europe (Coleman, 2008; Ferlay et al., 2007). The map in Fig. 1, reproduced with permission from the EUCAN project (Steliarova-Foucher et al., 2012) shows the generally higher age-specific mortality rates in CEE compared to Western Europe. This is particularly applicable to men as illustrated in Table 1 (reproduced with permission from the EUCAN project: Steliarova-Foucher et al., 2012). Table 2, reproduced with permission from the GLOBOCAN project illustrates the relatively high mortality to incidence ratios observed in CEE (GLOBOCAN, 2012, Cancer Incidence and Mortality Worldwide). Inadequate disease education and prevention and screening efforts, as well as limited health care resources, are all considered to be key factors contributing to this gap. Higher mortality rates are particularly evident in resource-limited areas and among disadvantaged groups such as the Roma population (Babusik and Papp, 2004).

The Bridging Cancer Care initiative aims to reduce the observed disparities in cancer care between CEE and Western Europe as well as promote health equity within CEE for populations disproportionately affected by cancer, including the poor, ethnic minorities and people living in rural communities with limited access to cancer services. Health equity refers to the status of differences in quality of health and health care across different populations (Colorado Department of Public Health and Environment, 2014). As such, it differs from the concept of health equality, which relates to health outcomes. The argument supporting the benefit of health equity for all has been cogently made by Amartya (2002).

In keeping with the Bristol-Myers Squibb Foundation’s other global initiatives, Bridging Cancer Care seeks to promote health equity by strengthening community-based health care worker capacity, integrating medical care and community-based supportive services.
services, advocating with partners for improvements in standards of care, enabling public policy changes based on lessons learned and mobilizing communities to fight disease. Since 2007, the program has directed grant making and partnership development in five countries in CEE toward programs focused on a variety of needs, including psychosocial support, patient and community education, palliative care, care coordination, assessment of cancer services, and building nursing capacity.

This last point, building nursing capacity, deserves special mention. There is variation in the number of nurses per head of population in Eastern Europe, between 3.9 per 1000 population in Albania, to 8.5 per 1000 in Russia (World Bank Data, 2010) and these levels are generally lower than those observed in northern Europe (e.g. 11.4 per 1000 population in Germany), but comparable to those in southern Europe (e.g. 5.1 per 1000 population in Spain). The standard nurse qualifications in Eastern Europe are broadly similar to Western Europe, often with two levels based on two to three years (e.g. basic training or degree courses) vs. three to four years of training (e.g. registered nurse or masters degree courses).

However, whereas some specific training in oncology nursing is now included in Western European basic nurse training programs, this is not always the case in Eastern Europe. Post-graduate specialized training programs have also been introduced in most Western European countries under their national cancer programs. More recently these have been introduced in some Eastern European countries such as Poland and Hungary. However, there are no such officially recognized specialist cancer trainings for nurses in Romania or Russia. Before the Bridging Cancer Care program was initiated, few palliative care training curricula existed in local languages for nurses in general (see Section Implementing the evidence-based national education initiative, the End-of-Life Nursing Education Consortium (ELNEC), to improve palliative care in CEE (Beckman Research Institute of City of Hope, U.S.A.) and there was very little oncology training available for community-based nurses.

Through the first three years experience of the Bridging Cancer Care program, from 2007 to 2009, the potential role that nurses might play in helping to fill the identified gaps in cancer care in CEE became evident from both literature review (Quinn, 2008; Mick, 2008; Thorne and Truant, 2010) and consultations with major stakeholders including the International Society of Nurses in Cancer Care (ISNCC), the European Oncology Nursing Society (EONS), the European Cancer Patient Coalition (ECPC), the European CanCer Organization (ECCO), International Union of Cancer Control (UICC) and the European Cancer Leagues (ECL). The strategic focus of the initiative was, therefore, refined in 2010 to put particular emphasis on enhanced nursing education, training and empowerment. It was also concluded that nurses could play a greater role in this regard if their capacity was enhanced appropriately. Moreover, this might apply to nurses working in a dedicated cancer center, a community hospital or clinic, or a public health agency. Appropriate training and education could promote their confidence in educating patients and delivering quality cancer care services in all settings and along the cancer care continuum. At the same time, community-based entities, from primary care clinics to patient groups to public health departments, could be facilitated to engage nurses and leverage their expertise to enhance the quality and impact of the medical, supportive and educational cancer services such organizations provide in the community.

Therefore, in 2010 the Bristol-Myers Squibb Foundation issued its first nursing-focused Request for Proposals, resulting in the award of six grants totaling more than US$900,000, which focused on improving cancer awareness, prevention and care by developing cancer nursing skills and building nurse-community partnerships in the Czech Republic, Hungary, Poland, Romania and Russia. In subsequent years the focus has remained the same.

<table>
<thead>
<tr>
<th>Table 3</th>
<th>Key aggregated indicators from “Bridging Cancer Care” projects.</th>
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</thead>
<tbody>
<tr>
<td>Perspective</td>
<td>Indicator</td>
</tr>
<tr>
<td>Overall operational excellence</td>
<td>% of funded proposals aligned with Bristol-Myers Squibb Foundation mission</td>
</tr>
<tr>
<td></td>
<td>% of projects meeting stated objectives</td>
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<tr>
<td></td>
<td>Number of partnerships contributing to the “Bridging Cancer Care” program</td>
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<tr>
<td>Health outcomes</td>
<td>Number of funded projects involving cancer screening</td>
</tr>
<tr>
<td></td>
<td>Number of patients benefiting physically</td>
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<td></td>
<td>Number of patients benefiting from psycho-logical support</td>
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<td></td>
<td>Number of funded projects involving palliative care</td>
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<tr>
<td>Health equity</td>
<td>% of funded projects targeting disproportionately affected populations (poor, ethnic and rural populations)</td>
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<tr>
<td></td>
<td>% of projects for which improved health equity or improved access to care was demonstrated</td>
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<tr>
<td></td>
<td>Total number of disproportionately affected individuals reached and benefiting</td>
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<tr>
<td>Capacity building</td>
<td>Total number of healthcare workers trained</td>
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<td></td>
<td>Total number of lay workers trained</td>
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<tr>
<td></td>
<td>% of healthcare workers demonstrating application of newly acquired skills/knowledge</td>
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<tr>
<td></td>
<td>Number of patients reached through educational initiatives</td>
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<td></td>
<td>Number of members of the general public reached through educational initiatives</td>
</tr>
<tr>
<td></td>
<td>Number of beneficiaries made aware of cancer risk factors</td>
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<tr>
<td>Community involvement</td>
<td>% of projects for which community capacity was positively affected</td>
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<tr>
<td></td>
<td>Total number of NGOs/CBOs positively capacitated</td>
</tr>
<tr>
<td>Sustainability/replication</td>
<td>Total number of publications demonstrating application in standards of care or care and support models</td>
</tr>
<tr>
<td></td>
<td>% of projects resulting in change in standards of care or care and support models</td>
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<tr>
<td></td>
<td>Additional external funding secured</td>
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<tr>
<td></td>
<td>% of projects successfully sustained</td>
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<tr>
<td></td>
<td>% of projects replicated</td>
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<tr>
<td></td>
<td>% of projects resulting in significant health policy or reimbursement implications</td>
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Summary of “Bridging Cancer Care” nursing projects

Between 2010 and 2013 Bridging Cancer Care has awarded 22 grants for projects in Russia, Poland, Czech Republic, Hungary and Romania as listed in Appendix A. The projects were selected which supported innovative and sustainable approaches to increase capacity and improve cancer nursing skills for oncology, general practice and public health nurses through:
The overall quality of the proposal and the degree to which it demonstrated a thorough understanding of current gaps in care and unmet need, and how it seeks to build upon existing comprehensive cancer prevention and care initiatives and/or create new models to address these gaps

The clarity of the stated project design

The significance of the expected outcomes and near-term impact of the project

The feasibility of achieving the goals and objectives specified in the proposal and the ability to assess and measure them at the end of the grant

The institution’s commitment, prior accomplishments and evidence of its successful track record in addressing issues related to cancer and/or patients most-at-risk of cancer

Demonstrated leadership and commitment from the head of the institution and other departments within the institution involved in the project and its sustainability

- Community partnerships bringing nurses together with patient groups, ministries of health, community groups, civic organizations, professional associations, and faith-based organizations
- Partnerships between nurse and physician associations or nurse/physician teams
- Nurse involvement in providing cancer care in the community e.g. psychosocial care, early detection, screening, health education, follow-up care, palliative care

Projects were also required to target underserved populations or populations disproportionately affected by cancer. Eligible applicants were established nonprofit and non-governmental organizations and academic institutions working at the regional, national and local levels. Successful applicants had to have a proven track record for implementing successful community-based health-related education and/or outreach programs, and have demonstrated capacity to make evaluated recommendations that can inform health policy and future strategies for prevention and improving support and care for those impacted by cancer.

Selection criteria:

Proposals were judged and scored according to each of the following criteria:

- A clear and appropriate monitoring and evaluation plan
- A clear and achievable sustainability plan
- The quality, experience and appropriateness of the project staff and the reasonableness of the proposed budget

Based on the above criteria, 22 grants have been awarded to date with a total value of $3,196,190. The majority of individual grants were two-years in duration with funding of approximately $150,000 each.

Summary of outcomes of Bridging Cancer Care projects

Performance evaluation

As a standard practice, the Bristol-Myers Squibb Foundation places emphasis on evaluating the outcomes of the projects it funds, and in 2013, the Foundation implemented a new monitoring and evaluation framework based on the Balanced Score Card approach to strategic planning and performance evaluation. For each programmatic area, including Bridging Cancer Care, performance is evaluated according to the following six perspectives:

1) Overall operational excellence
2) Health outcomes
3) Health equity
4) Capacity building
5) Community involvement and mobilization
6) Sustainability and replication

Each individual grant is scored against a predetermined set of criteria within each of these perspectives and the results can then be aggregated across the “Bridging Cancer Care” portfolio. Key aggregated indicators calculated for all 16 evaluable grants as of December 2013 are displayed in Table 3.

All 22 grants were aligned with the mission of the Bristol-Myers Squibb Foundation, in that they all target populations disproportionately affected by serious disease. The funded projects were pilot in nature, intended to test new models of care and support in the community, with the anticipation that successful models could subsequently be scaled up or replicated. Although the focus of these

<table>
<thead>
<tr>
<th>Grantee</th>
<th>Smoking cessation</th>
<th>Public education</th>
<th>Cancer screening</th>
<th>Nurse training</th>
<th>Patient care</th>
<th>Family support</th>
<th>Palliative care</th>
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<tr>
<td>Beckman Research Inst. of City of Hope</td>
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<td>National Center of Nursing and Other Health Professions (Czech Rep.)</td>
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<td>Partners in Progress (Romania)</td>
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<tr>
<td>World Services of La Crosse, Inc. (Russia): 1st grant</td>
<td>X</td>
<td>X</td>
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<td>X</td>
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<td>Hungarian Hospice Foundation: 2nd grant</td>
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<tr>
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<td>Triedinstvo (Russia)</td>
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<tr>
<td>Hospice Casa Speranței (Romania)</td>
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<td>Russian Nurses Association and University of Washington</td>
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<td>Project HOPE Poland: 2nd grant</td>
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<tr>
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<tr>
<td>International Society of Nurses in Cancer Care (CEE Center of Excellence): 3rd grant</td>
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projects is primarily one of building capacity of nurses, the projects have the potential for consequent benefit to patients. This is to a large extent the result of improved access to care especially for disproportionately affected patients. Of the sixteen programs, which have progressed sufficiently to allow evaluation, 11 or 75% have resulted in improvement in health equity or improved access to care and a total of 35,493 disproportionately affected individuals have been reached or have benefitted. Disproportionately affected patients are defined as child, poor, rural or ethnic populations suffering from various levels of social deprivation. The “Bridging Cancer Care” projects deliberately targeted such populations, often implementing interventions which delivered care more directly to patients in their communities. For example, the Hungarian Hospice Foundation project targeted the Roma population of Hungary through training and deployment of community-based nurses, as a result of which 1368 Roma were evaluated and 632 were subsequently referred for screening (see Section Needs assessment, cancer screening and case management of the segregated, underserved population in Hungary (Hungarian Hospice Foundation, Hungary)). The Romanian Cancer Society project was located predominantly in rural areas of the North West region of Romania and eventually reached 21,940 individuals through pre-scheduled follow-up visits by community nurses in their communities. In addition, four projects promoted improved access to cancer screening and subsequent referral of patients diagnosed with cancer. For example, the World Services of La Crosse project in Balakovo, Russia was associated with a 20% increase in the number of women presenting for mammographic screening of breast cancer (see Section Enhancing nursing practice and supportive care of patients with breast and intestinal cancer (World Services of La Crosse, Inc.)). Project Hope in Poland concentrated on raising awareness about signs and symptoms of childhood cancer.

Many projects resulted in significant changes in standards or models of care or changes in community structures supporting patient care as described in Sections Changes in standards or models of care and Community capacity building. In addition 50% of the evaluable projects were judged as having significant health policy implications and these are described in detail in Section Policy implications for oncology nursing in CEE and other low resource countries. A key component of the original project proposals was planning for project sustainability. All 16 evaluable projects are judged to have been successfully sustained beyond the funding and resources provided by Bristol-Myers Squibb Foundation and examples are to be found in each of the case studies in this supplement.

Three projects were assessed as having been especially successful, resulting in decisions by the Bristol-Myers Squibb Foundation to provide the implementing organizations additional funding in order to establish Centers of Excellence. These three projects were distinguished by their demonstration of leadership, exceptional capacity building of nurses, resulting improvements in access to care and changes in standards or models of care, implications for health policy and successful sustainability or replication. Thus, the International Society of Nurses in Cancer Care and Community capacity building. In addition 50% of the evaluable projects were judged as having significant health policy implications and these are described in detail in Section Policy implications for oncology nursing in CEE and other low resource countries. A key component of the original project proposals was planning for project sustainability. All 16 evaluable projects are judged to have been successfully sustained beyond the funding and resources provided by Bristol-Myers Squibb Foundation and examples are to be found in each of the case studies in this supplement.

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The following sections concentrate on summarizing the outcomes of capacity building, which was key to all projects.

**Project foci**

By definition, because of the criteria for grant selection, all Bridging Cancer Care projects funded since 2010 were primarily aimed at building nursing capacity and empowering nurses to assume expanded roles in cancer prevention, screening and detection or in the care and support of cancer patients and their families. Many projects addressed more than one of these capacity building objectives as Table 4 illustrates.

Although all cadres of nurses have been addressed, community-based nurses or nurses in primary health care settings in particular were involved and trained. Depending on the project, community capacity was also built through empowerment of non-governmental organizations (NGOs) and community-based organizations (CBOs) as well as by raising public awareness about cancer through educational programs or providing support for patients and their families in their communities. The following sections provide details of the projects’ capacity building outcomes.

**Didactic training**

Didactic training was key in almost all projects. In total, 5724 healthcare workers (primarily nurses) have received such training across the 16 evaluable projects. An additional 369 lay workers (e.g. volunteers, support personnel or other individuals not specifically qualified as healthcare workers) also received training. Many of the projects included the creation of customized training curricula for the various cadres of trainees and the various oncology content.

Customization was important in order to address language, the cultural context and the specific subject matter. A total of 17 nurse-focused curricula have been developed through the Bridging Cancer Care program and many are described in the case studies following in the present supplement. Nine of these curricula were subsequently accepted for training purposes in national nursing schools. The following examples serve to illustrate the level of customization.

Some curricula had a narrow specialized focus. For example, the curricula utilized by the International Society of Nurses in Cancer Care to launch smoking cessation programs in the Czech republic and Poland were designed to train Master Trainers and then provide them with the materials to train nurses nationwide. The materials were very specific to the dangers of smoking and methods to encourage patients to quit.

In other cases, the curricula targeted a particular patient population. For the Hungarian Hospice Foundation’s program entitled “Engaging nurses to encourage Roma people in Hungary to participate in cancer screenings and to seek care when needed” a short, 20 h, highly customized curriculum was developed to provide training for general practice and public health nurses covering the benefits and logistics of cancer screening and referral as well as cultural and legal aspects relevant to the Roma population.

Similarly the Project HOPE Poland project “Improvement in early detection of cancer in children by training community nurses and primary healthcare teams” created two curricula focused on the pediatric population; one for training Master Trainers and one basic training for primary health care providers. The Master Trainers were subsequently able to provide training for primary health care nurses and physician/nurse teams. Physicians were required to attend the trainings with a nurse in order to be accepted to the program.

As a further example, the Partners in Progress project in Romania adapted a training curriculum, based on the oncology course taught at the University of Constanța, requiring only 20 h to complete and which was specifically designed for non-specialist
community based nurses in rural parts of Tulcea and Dobrogea districts.

Several projects established different curricula for different cadres of nurses. In the case of the grant awarded for the Beckman Research Institute of City of Hope and Hospice Casa Sperantei palliative care projects, three levels of curricula were developed: level A basic, level B advanced and level C specialist. Uniquely, the latter included not only training on specialist aspects of oncology nursing, but also leadership training designed to develop a team of nurses who can lead the future direction of palliative care nursing in Romania and potentially other neighboring countries. They will do so by providing training, guidance and motivation for other nurses, as well as actively advocating within the healthcare system and at the level of Ministries of Health for the expanded role of nurses in palliative care.

In some cases local training curricula were created on the basis of existing materials from other countries. The original advanced or level B curriculum described above was based on materials originally prepared by the End-of-Life Nursing Education Consortium in the U.S.A. (Ferrell et al., 2010). Other such examples include the World Services of La Crosse, Inc. project in Balakovo, Russia and the project of the National School of Public Health, Management and Professional Development in Romania. Both of these adapted training based on the U.S. Model of the Oncology Nurse Navigator and/or Nurse Care Coordinator. The oncology subject matter of the Romanian version was focused on key elements identified through an initial extensive needs assessment.

In some cases, training curricula developed by the projects gained recognition by educational institutions. This was true for the World Services of La Crosse, Inc. curriculum adopted by Balakovo Secondary Medical School and the curriculum developed by the National Center of Nursing and Other Health Professions in the Czech Republic. Participants in the latter training obtain 48 credits of continuing medical education. Further examples of accreditation are provided in the individual case studies.

The immediate benefits of didactic training were evaluated in the majority of projects. Three methods were utilized. Firstly, trainees could be given pre and post training tests. In all such cases, substantial increases in knowledge were demonstrated as detailed in many of the individual case studies.

Secondly, some projects asked the trainees immediately at the end of the training how confident they felt of utilizing the newly acquired knowledge or skills. For example, after the Project Hope Poland Master Training, 70% of the Master Trainers reported being “Comfortable and able to perform with confidence” or “Somewhat uncomfortable but could perform adequately” concerning the early detection and diagnosis of childhood cancer on post self-evaluation test compared to only 10% prior to the training.

Thirdly, many projects asked the trainees to evaluate the training in terms of content, presentation and relevance using Likert scales. They also allowed specific commentary on how the training courses could be improved and where possible the training and curricula were modified accordingly.

Assessing the level of retention of didactic training is important, but perhaps even more pertinent is to determine if the trainees apply their newly acquired knowledge and skills in the workplace. This was achieved through two mechanisms depending on the project. In some cases trainees were requested within 3–12 months after the training to complete questionnaires asking them specifically which skills and knowledge they had applied in their regular work. In other cases, project personnel visited trainees at their work place and observed directly if and how new knowledge and skills have been utilized. On this basis, 86% (2989/3482) of trainees were assessed as having done so. Examples of new knowledge and skills developed though these projects include a) determining the extent to which nurses implemented smoking cessation interventions in their daily practice through the project run by the International Society of Nurses in Cancer Care (see Section Tobacco cessation leadership workshops for nurses in the Czech Republic, International Society of Nurses in Cancer Care (ISNCC)), b) documentation of home visits (total of 288) for cancer patients and briefings for families and children at health care facilities and schools (total of 56) by Project Hope, Poland (see Section Improving early detection and diagnoses of childhood cancer in five regions of Poland (Project HOPE – Poland) and c) documentation of teaching women self-examination for breast cancer (total of 1119 women) in the Polish Amazons Social Movement project (see Section Nurses for cancer patients (the Polish Amazons Social Movement, Poland)).

Changes in standards or models of care

The long-term benefit of training or empowerment of nurses was observed in several projects, which resulted in significant changes in standards or models of nursing practice. In some cases the changes are at a local or institutional level, whereas in others, standards of care have been affected nationally. The following are some examples.

Both the World Services of La Crosse, Inc. project in Balakovo and the project run by the National School of Public Health, Management and Professional Development in Romania, led to the institutionalization of the Nurse Navigator model of care in the communities involved. This was in effect a newly created job for which nurses could apply and obtain specialized training.

The Beckman Research Institute of City of Hope project has substantially enhanced knowledge and skills in palliative care in the Czech Republic, Hungary, Russia and Romania. The follow-on grant provided to Hospice Casa Sperantei is further strengthening the standards of palliative care in Romania and throughout the region. In addition, through the future Nursing Institute in Palliative Care, the Bristol-Myers Squibb Foundation will be funding Hospice Casa Sperantei as a Center of Excellence, providing leadership in palliative care across the region.

One of the recent Bridging Cancer Care grants to the organization “Triedinstvo”, in Severodvinsk in the Russian Federation, has advocated for effective pain control for cancer patients. As a consequence, a pain control center is now being established at the City Hospital in Severodvinsk.

As a result of the Hungarian Hospice Foundation’s work, the National Public Health and Medical Officer Service of Hungary has started a new national family nurse program, through which 1300 family nurses will be trained to promote cervical cancer screening in small villages. It is intended that this will benefit the Roma population in particular, as they have, to date, remained underserved by national screening programs.

Further to Project HOPE’s work in Poland, national guidelines are being developed for best practices in screening and referral for children suspected of cancer at the primary health care level.

Community capacity building

In 13 of the projects, it was judged that community capacity was effectively built. This was achieved through several mechanisms. Capacity for the community as a whole was enhanced through education programs for patients themselves and for the general public. Overall 50,503 patients were reached through educational initiatives. A total of almost 500,000 members of the general public were recipients of education, among whom approximately 10% were made aware of cancer risk factors in particular. Examples of these educational programs are listed below:

- Partners in Progress established “health information points” in local libraries to educate patrons on cancer and indicate
associated resources (see Section Learn, share, live better (Partners in Progress Association, Romania)).

- Nurses trained within the Romanian Cancer Society project organized information sessions to educate the general public on cancer risk factors and healthy lifestyle for cancer prevention (see Section Cancer care capacity building for nurses in Romania (Romanian Cancer Society — Romania)).

- The Polish Amazons Social Movement conducted an advertising campaign on major Polish television stations to educate viewers on cancer and cancer screening events (see Section Nurses for cancer patients (The Polish Amazons Social Movement, Poland)).

- Project HOPE Poland coordinated campaigns about childhood cancer on national and regional TV stations, local internet sites and around Health and Cancer Days (see Section Improving early detection and diagnoses of childhood cancer in five regions of Poland (Project HOPE — Poland)).

- “Triedinstvo” has initiated a Breast Cancer Awareness Month in the Russian city of Severodvinsk. This happens in October, with information distributed in clinics, pharmacies and shops.

- The National Center for Nurses and Other Health Professionals in the Czech Republic organized three promotional events for the general public with the aim of promoting healthy life styles and making the general public acquainted with primary and secondary prevention of the most frequent sorts of cancer. Nurses took an active part in organizing these events.

- The World La Crosse Services, Inc. project in Balakovo, Russia included citywide campaigns to raise awareness about cancer. This was followed by an increase in women presenting for mammography (see Section Enhancing nursing practice and supportive care of patients with breast and intestinal cancer (World Services of La Crosse, Inc.)).

A large number of non-governmental and community based organizations were involved in these projects. Of a total of 247 such organizations, 238 or 96.4% were judged to have been positively affected through the project activities.

**Challenges and lessons learnt**

As one would expect, a program as broad in scope as Bridging Cancer Care faced multiple challenges and many lessons were learnt. These have been categorized below according to the following levels:

- Health authority and institutional level
- Project design level
- Project implementation level
- Training level
- Nurse level
- Patient level
- Family level
- General public level

Health authority and institutional level:

All Bridging Cancer Care grantees have met with local or national health authorities either at the time of designing the project, during its implementation or to advocate for health policy change based on the project results. Health authority buy-in was key to successful implementation. In some cases, dialogue with health authorities was also initiated to introduce changes in the existing health service to facilitate specific elements of a project.

A unique issue occurred in Romania with the Partners in Progress project (see Section Learn, share, live better (Partners in Progress Association, Romania)). There, retaining support from local authorities proved difficult. During the project there were local elections in Romania, as well as three changes in central government. Many of the local leaders involved in the project were not re-elected and consequently additional effort was necessary to secure the support of the newly elected mayors and officials.

In all cases, buy-in from the institutions at which the projects were implemented was also essential and was successfully attained for most projects. However, this did not apply for one country location in the multi-country project entitled “Implementing the End-of-Life Nursing Education Consortium (ELNEC), a national education initiative to improve palliative care, in the Czech Republic, Hungary, Poland, Romania and Russia” conducted by City of Hope (see Section Implementing the evidence-based national education initiative, the End-of-Life Nursing Education Consortium (ELNEC), to improve palliative care in CEE (Beckman Research Institute of City of Hope, U.S.A.)). Unique among CEE countries, Poland has very well developed palliative care services, comparable or even superior to many Western European countries (Centeno et al., 2013). Although the initial ELNEC training component of this project involved nurses from all five countries, the necessary support to train nurses throughout Poland was not obtained at institutional level, because palliative care services are closely controlled by physicians, who did not fully appreciate the added value that nurses could bring.

In eight cases, the results of the projects had clear health policy implications, which are described in detail in Section Policy implications for oncology nursing in CEE and other low resource countries. Several of these implications have been translated into practice and this was only possible because the grantees maintained a close dialogue with health authorities and institutions and advocated for relevant policy change.

**Project design level:**

Selecting appropriate projects for funding is an important challenge. From experience, the Bristol-Myers Squibb Foundation already knew the importance of providing clear directions to applicants about project design. The Bridging Cancer Care program, therefore, followed this dictum as described in Section Summary of “Bridging Cancer Care” nursing projects. The predetermined grant selection criteria were also applied rigorously. Consequently, all sixteen evaluable projects were aligned with both the Bristol-Myers Squibb Foundation mission (see Table 3) and the strategy of “Bridging Cancer Care” including the focus on capacity building of nurses.

A carefully developed and rigorously implemented monitoring and evaluation (M&E) framework is necessary for effective performance evaluation. In several cases, it was determined later that the grant application’s M&E components had either been inadequately developed or not rigorously followed during project implementation. The Bridging Cancer Care team addressed this by instituting standard M&E templates and procedures for all projects selected for funding from 2012 onwards.

A comprehensive needs assessment, is a key element in ensuring good project design. This was apparent for all Bridging Cancer Care projects, particularly in relation to capacity building of nurses and was detailed in their original applications. The project implemented by the National School of Public Health, Management and Professional Development in Romania went a step further (see Section Adaptation and implementation of the U.S. Model of the Oncology Nurse Navigator in Romania (National School of Public Health, Management and Professional Development, Romania)). That grantee decided on the need for extensive initial research concerning cancer services in Romania from prevention to treatment, accessibility to these services by persons living in economically undeveloped areas, together with a description of the most frequent types of cancers by gender, age and geographic location.
This was, therefore, included as an initial phase of the original project design. Establishing access to expert advice can be very beneficial for good project design. Thus, Project Hope in Poland put together a Senior Technical Advisory Group consisting of oncology experts, who helped to fashion the project design, especially in relation to the needs of children with cancer and in terms of the project’s intervention and measurement of outcomes (see Section Improving early detection and diagnoses of childhood cancer in five regions of Poland (Project HOPE – Poland)).

Project implementation level:
Again from experience, the Bristol-Myers Squibb Foundation knew the importance of close follow up of projects during their implementation. Therefore, the Bridging Cancer Care team carefully designed and implemented biannual project reporting mechanisms. As a result, they were able to identify issues in project implementation as they occurred and institute corrective and preventative action when necessary. Overall, as illustrated in Table 3, for fifteen out of the sixteen evaluable projects, the objectives outlined in the original proposals were met. The remaining six projects listed in Table 4 have not been comprehensively evaluated because they are not yet finalized.

While attention to predetermined project objectives is important, flexibility was also permitted in response to changing circumstances. Thus, during the implementation of the World Services of La Crosse, Inc. project in Balakovo, Russia, local Russian project personnel were exposed to a care model involving the integration of care coordinators and nurse navigators while visiting Gundersen Lutheran Medical Center in the U.S.A. They felt strongly that this model could be very beneficially applied to their situation in Russia, and as described in the case study in Section Enhancing nursing practice and supportive care of patients with breast and intestinal cancer (World Services of La Crosse, Inc.), the project was allowed to include the relevant training such that three city polyclinics in Balakovo have now introduced the nurse care coordinator role.

Project Hope’s work in Poland (see Section Improving early detection and diagnoses of childhood cancer in five regions of Poland (Project HOPE – Poland)) was focused on improving early detection of pediatric cancer. In their originally submitted proposal, increase in detection of early stage cancer was included as an eventual impact in the M&E plan. However, it was later recognized that this would be dependent on national cancer statistics and, as such, would require several years before becoming evident. Consequently, at the suggestion of the project’s Senior Technical Advisory Group, a sub-indicator was developed; namely time from first symptom to hospitalization in a specialized center.

The Romanian Cancer Society’s project originally concentrated on melanoma, gastric and colon cancer (see Section Cancer care capacity building for nurses in Romania (Romanian Cancer Society – Romania)). However, during the first training and at meetings with representatives of local health authorities, the need to embrace a wider cancer prevention program became evident. After agreement from Bristol-Myers Squibb Foundation, the team consisting of representatives from the Cluj Oncology Institute, the Local Health Authority and the Romanian Cancer Society, proceeded to develop a brochure and guidelines regarding cancer prevention in general.

Training level:
Because Bridging Cancer Care’s projects focused on capacity building for nurses, close attention was paid to the creation of training materials and courses as described in Section Didactic training. It was quickly understood that very little existed in the way of cancer curricula for nurses in the required CEE languages. Thus, curricula were developed in Czech, Romanian, Polish, Hungarian and Russian.

As mentioned in Section 2.3.3, the effectiveness of didactic training was often assessed by testing participants’ knowledge before and after training. However, evaluating whether the participants retained new knowledge and applied it in their workplace thereafter was found to be much more challenging and time consuming. It is, therefore, recommended to include the means and resources to do so upfront in the design of such capacity building projects.

It was also found useful to have the participants evaluate the training themselves and provide feedback which could then inform enhancements of the training. In some cases more radical modification might be called for. In the case of Project Hope Poland, the original multiple–day training for primary health care professionals was found to be unnecessarily long and was replaced by a one day, small group intensive training including practical exercises. As a consequence more than double the originally envisaged number of trainees could eventually be trained.

Nurse level:
As mentioned in Section Project description the Bridging Cancer Care originally focused on investigating and determining effective means of addressing disparities in cancer care and outcomes between CEE and Western Europe. Perhaps the biggest learning of all from the program was that although oncology nurses are seen as trusted professionals in CEE, they are underutilized in comparison with Western Europe and the U.S. This led to the change in the Bridging Cancer Care program from 2010 onwards. It had become evident that there was inadequate cancer education in the formal nurse curricula of most CEE countries. Moreover, nurses are not empowered to act autonomously with regard to patients and their families, but are usually dependent on physicians. This is also true with respect to palliative care. Physicians frequently do not have the time to manage patients at the end of life, even if they are the principal managers of palliative care services.

Therefore, from 2010 onwards, emphasis was placed on capacity building for nurses to expand their role in all aspects of cancer prevention, detection and patient care and treatment, particularly at community level. The consequence is that targeted nurse training has demonstrated the potential to improve access to care and deliver improved health outcomes for patients.

Within the structure of oncology nursing in CEE, it was also observed that there was little opportunity for nurses to assume leadership roles. This led to the funding by Bridging Cancer Care of the Hospice Casa Speranței project in Romania, which includes a specially designed nurse leadership curriculum as described in Section Educating and developing Central and Eastern European Oncology Nursing Leaders in Palliative Care and Providing basic Palliative Care education to nurses in rural areas (Hospice Casa Speranței, Romania). It is hoped that thereby, oncology nurse leaders will play an even more prominent role in the future in advocating both for patients and for their profession.

Motivating nurses to become fully invested in the projects was problematic in some cases, because they generally receive low salaries. To some extent, however, the training itself and the consequent sense of empowerment helped to motivate the trainees. Some of the projects, such as Project Hope Poland also partially overcame this issue by obtaining accreditation of the training curriculum by regional medical universities.

Patient level:
Early during the Bridging Cancer Care program and based on needs assessment by many of the grantees, it was understood that the level of education and understanding of patients and their families about cancer was generally low in CEE.
Therefore, many of the projects incorporated educational initiatives and across the sixteen evaluable projects 50,503 patients benefited in this way. Nurses played key roles in disseminating such education. For example nurses in the program run by the Hungarian Hospice Foundation conducted cancer awareness among the Roma population of Hungary and thereby reached almost 7000 individuals (see Section Needs assessment, cancer screening and case management of the segregated, underserved population in Hungary (Hungarian Hospice Foundation, Hungary)). Nurses in the project conducted by the Romanian Cancer Society made presentations to 21,940 members of the general public (see Section Cancer care capacity building for nurses in Romania (Romanian Cancer Society Romania)).

Many projects also recognized the need to provide more than just clinical service to patients, because of the inevitable psychological distress caused by the disease. Two of the recently funded projects include specific measures to support patients psychologically, namely the “Triedinstvo” project in Severodvinsk, Russia and the “Dragoș Nurse” project in Romania (see Section Key specialist nurses for children and young adults with cancer: the “Dragoș Nurse” Project (Hospices of Hope, United Kingdom)), in particular through nurse run and continuously manned telephone help lines. In other cases, modifications were made during project implementation. For example, through the website set up by the “Partners in Progress” project in Constanta, Romania (see Section Learn, share, live better (Partners in Progress Association, Romania)) project staff were made aware of the patients’ need for psychological support and counseling. Consequently four licensed volunteer psychologists were enrolled, who now provide free counseling services on a biweekly basis. This project also established community support groups for patients and nurses are important members of these groups.

General public level:
In addition to discovering that patients needed education about cancer, several projects identified the need to educate the general public by raising awareness about cancer prevention and screening. Results from the World Services of La Crosse, Inc. project in Balakovo, Russia demonstrated the effectiveness of such efforts as described in Section Enhancing nursing practice and supportive care of patients with breast and intestinal cancer (World Services of La Crosse, Inc.). Repeat testing showed marked improvements in attendees’ knowledge about breast and colon cancer (see Table 7).

Palliative care:
As mentioned above palliative care services remain underdeveloped in most of CEE except Poland (see Fig. 2).

Many lessons were learned in relation to palliative care services. These were mostly derived from the City of Hope training program for five CEE countries and the subsequent extension of the concept with Hospice Casa Speranței in Romania. Key findings included:

- Nurses in the CEE are not empowered to act independently in the provision of palliative care services
Financial factors, such as lack of reimbursement for opiates prevent early referral to hospice/palliative care (Lynch et al., 2008). There are inadequate numbers of formulations and supplies of opiate medications and the optimal usage of them is hampered by regulation, inadequate training, consequent misconceptions and cultural issues related to death and dying (Lynch et al., 2008).

Ethics consultation teams are lacking at most institutions.

The City of Hope project assisted with the above first two bullet points, particularly with regard to the role of nurses in palliative care. The issues around opiate usage merit further explanation. In general there are restrictive opiate prescribing regulations (Lynch et al., 2008). These include requiring special patient permits, limiting the prescribing authority of physicians even for patients with severe pain, imposing arbitrary dosing and duration of dosing limits and complex prescription forms and reporting requirements. There is reluctance to provide adequate opiate dosing in case this is perceived as contributing to premature death. Lack of understanding also means that dosing is not escalated as required by the development of tolerance and there is unnecessary concern that the patient may develop addiction (Lynch et al., 2008). These factors have informed the design and selection of several new projects for Bristol-Myers Squibb Foundation funding in 2012, in which pain relief has been prioritized.

In addition, the grantees have concluded that it is necessary to engage with Ministries of Health to promote policies which increase palliative care training for nurses, empower nurses to act independently of physicians, provide information to the general public and families of patients about issues associated with the end of life and augment availability of pain-relieving medication. Reimbursement for palliative care is also an issue in several CEE countries. The Hospice Casa Speranței has been especially active in terms of advocating for reimbursement of palliative care in Romania.

Policy implications for oncology nursing in CEE and other low resource countries

Bridging Cancer Care has demonstrated that capacity building of oncology nurses is feasible, with consequent potential positive effects on health equity, cancer screening behavior, patients’ and their families’ knowledge about cancer, patients’ physical and psychological wellbeing and the general public’s awareness about cancer and preventive measures.

Therefore, there are implications for health policy with regard to oncology nursing in CEE and potentially in other resource-limited settings. In this section, general implications are first listed, followed by a description of policy changes, which have already been instituted.

General considerations:

Overall the program results indicate that health authorities and institutions could benefit significantly from a more expertly trained and empowered oncology nurse workforce. To this end, the Bridging Cancer Care team supports the grantees in advocating at both health authority and institutional level. Health authorities can introduce new policy approving expert training of oncology nurses and entitling them to take independent measures to support patients. Nursing colleges and health facilities can provide the expert training and ensure that nurses are empowered in the workplace. The effectiveness of the various oncology curricula developed through the program can catalyze their incorporation as standard elements of both pre-service and in-service nurse training. Policymakers can choose curricula appropriate to the setting: either specialist or community-based.

Policy changes could be introduced which provide nurses with the resources and the necessary empowerment to educate patients and their families about the disease and better means of self-management. Nurses could be particularly effective, given that physicians often do not have sufficient time for this sort of activity.

The Bridging Cancer Care projects focused on palliative care indicate that policy could be enacted to empower nurses in various ways including permitting highly qualified nurses or nurse practitioners to prescribe opiates for pain relief and providing community-based nurses with more resources to manage patients at the end of life.

Policies aimed at educating the public about cancer could also be beneficial. These can be directed at education concerning both cancer prevention and early detection and once again nurses can play key roles. Nurses can provide information on healthy lifestyles including crucially the advantages of smoking cessation, can teach women how to self-examine for breast cancer and can promote screening services such as mammography and colonoscopy. Community nurses could be especially instrumental in this regard. In addition they are the most appropriate cadre to reach disadvantaged populations, such as the Roma in their communities and could, thus, contribute to improved health equity and access to care.

Policies modified or enacted through “Bridging Cancer Care” projects:

World Services of La Crosse, Inc.: Nursing Education in Prevention, Screening and Treatment of Breast and Colorectal Cancer:

This project, implemented in Balakovo, Russia included the development of a nurse oncology training program, which has now been formally integrated into the nurse training of Balakovo Secondary Medical College. In addition the Balakovo Municipal Health Administration has approved expansion of the scope of practice of nurse care coordinators, based on the U.S. nurse navigator model and three city polyclinics have already introduced them.

National Center of Nursing and Other Health Care Professions: Cancer Prevention in Community Care:

This project was implemented in the Czech Republic. The most significant outcome was that the associated training and curriculum attained official accreditation from the Ministry of Health. In addition, the Ministry determined that the National Center of Nursing should be the only institution accredited to implement the training in the future.

Hungarian Hospice Foundation: Needs Assessment, Cancer Screening and Care Management of the Segregated, Underserved Population in Hungary:

The program has resulted in a significant change in standards of care among the Roma population with consequent policy implications. The success of involving nurses has led the National Public Health and Medical Officer Service to initiate a new national program, which will train 1300 family nurses in promotion of cancer screening in rural areas.

Polish Amazons Social Movement: Nurses for Cancer Patients:

Subsequent to this program, an innovative model of oncological education for community and family nurses is being developed by the Polish Association of Oncological Nurses. It is anticipated that it will be utilized across all of Poland.

Project HOPE Poland: Improving Early Detection and Diagnosis of Childhood Cancer in Five Regions of Poland:

The Project HOPE grantees are working with the Polish Ministry of Health and the results of their project are informing National Guidelines being developed on screening and referral for children suspected of cancer at primary health centers.

Beckman Research Institute and Hospice Casa Speranței: ELNEC projects in CEE and Romania.
Over the last year Hospice Casa Speranței has been cooperating with the Romanian Ministry of Health in the development of a National Program for Palliative Care. The Hospice team has submitted a draft directed at both the level of primary and community care, as well as at specialized palliative care services. The proposed program is based on a national Strategy for palliative care, conceived by a task force (specialists of different professions working in palliative care services in the public and charitable sectors) with the support of specialists from NICE (National Institute for Health and Care Excellence of the United Kingdom).

Case studies

Engaging nurses in tobacco control

Tobacco cessation leadership workshops for nurses in the Czech Republic. International Society of Nurses in Cancer Care (ISNCC) Stella Bialous, Linda Sarna (University of California, Los Angeles, U.S.A.), Sarah McCarthy (ISNCC). The International Society of Nurses in Cancer Care (ISNCC) is an international non-governmental membership organization whose mission is to maximize the role of nurses to reduce the global burden of cancer. As a global nursing community, ISNCC fosters the improvement of health, through cancer control. ISNCC is a non-governmental member of the World Health Organization (WHO) and the United Nations UN DPI NGO and is affiliated with the International Council of Nurses (ICN) and the Union for International Cancer Control (UICC).

Project description. The overall goal of this project was to build capacity among nurses in the Czech Republic for leadership in tobacco control, focusing on smoking cessation. Tobacco use is the leading cause of preventable disease and death in the country and the leading cause of cancer deaths (Peto et al., 2012). If adequately trained in brief smoking cessation interventions, the over 100,000 Czech nurses, representing the largest group of health care providers in the country, could make a significant impact in reducing tobacco-related death and disease.

Specific objectives included:

   a) To identify two Nurse Champions in the Czech Republic to be trained as national-level master trainers capable of reviewing, adapting and delivering ISNCC's evidence based capacity building Tobacco Cessation Leadership Workshops to nurses in the Czech Republic.

   b) To provide technical assistance and supervision to the Nurse Champions as they conduct a Pilot Tobacco Cessation Leadership Workshop with the aim of refining the adapted content and finalizing the curriculum and training materials.

   c) To launch the Tobacco Cessation Leadership Workshop as a preconference to the 17th International Conference on Cancer Nursing in Prague, Czech Republic, where the Nurse Champions will deliver the Workshop to a carefully selected group of Czech Republic nurses with the greatest potential for tobacco cessation and cancer prevention leadership and ability to roll out the Workshop in their home communities and institutions.

   d) To evaluate the effectiveness of the Workshop as a catalyst for nurses' involvement in smoking cessation and changes in the scope of practice.

Project outcomes. All the project objectives were reached. Four Nurse Champions were identified and a pilot workshop about tobacco dependence treatment was conducted in 2011, with 15 nurse participants from Prague and nearby cities, to test and refine the workshop content and materials. The pilot workshop program included a visit to the smoking cessation clinic of Charles University in Prague.

Twenty-two nurses from throughout the country attended the Tobacco Cessation Leadership Workshop in September 2012, led by the Nurse Champions, during which they were trained to deliver the Workshop to nurses in their local communities and workplaces. The content included evidence-based treatment for tobacco dependence designed to guide brief interventions by nurses. Brief interventions, implemented in approximately 5 min, consist of a set of standard questions, that nurses can use to ask about patient status, advise patients to quit, assess willingness to quit, assist patients in developing a quitting strategy and arranging for follow-up after discharge through referral to a telephone quit-line and to community-based cessation resources (Sarna et al., 2012). Educational materials developed included fact sheets on tobacco and tobacco control in the Czech Republic and the nurses' role in tobacco control and smoking cessation as well as a PowerPoint slide presentation, with an accompanying script to be used by the nurses for future additional trainings.

The impact of the training was evaluated in the field. Eight Workshop participants volunteered to collect baseline data related to smoking cessation knowledge, attitude and behaviors, as well as conduct a baseline assessment on clinical practice as they rolled out the Workshop in their home communities, workplaces and institutions. They also agreed to distribute a follow-up questionnaire to training participants who volunteered to be in the study three months after the training to assess resulting changes in clinical practice. Data were collected using a valid and reliable instrument that was translated into Czech (Sarna et al., 2012). The primary outcome measure was nurses' frequency of interventions (i.e., advising smokers to quit, assessing interest in quitting, assisting with cessation, arranging for follow-up, and referring to a telephone quit-line). Additionally, nurses' beliefs and attitudes about smoking cessation were assessed. Baseline data from 157 nurses of the approximately 300 who participated in the trainings indicated that 29.5% were current smokers. While 63% of nurses always or usually asked patients about their smoking status, fewer (46%) provided advice on how to quit smoking, assisted in developing a cessation plan (26%) or arranged for follow-up (11%). Only 7% “always” referred smokers to a quit-line. When comparing delivery of interventions to help smokers quit, nurses who smoked were less likely to consistently provide interventions. Nurses' beliefs and attitudes on smoking cessation interventions are displayed in Table 5.

Table 5

<table>
<thead>
<tr>
<th>Statement</th>
<th>% Who agreed/ strongly agreed</th>
</tr>
</thead>
<tbody>
<tr>
<td>It is difficult to get patients to quit smoking.</td>
<td>28</td>
</tr>
<tr>
<td>Patients appreciated receiving advice about quitting</td>
<td>35</td>
</tr>
<tr>
<td>Feel uncomfortable asking patients if they smoke</td>
<td>22</td>
</tr>
<tr>
<td>Nurses could play an important role in helping patients quit</td>
<td>22</td>
</tr>
<tr>
<td>Need more training to help patients quit</td>
<td>47</td>
</tr>
<tr>
<td>Providing smoking cessation interventions is important</td>
<td>73</td>
</tr>
</tbody>
</table>

Of the nurses who completed the evaluation survey, 98 nurses had pre and 3-month post training data (Sarna et al., 2014). Compared to baseline, 3-months after the educational program, more nurses engaged in interventions to help smokers quit, including assessing patients' interest in quitting, assisting with quit attempts, recommending the use of the quit-line for cessation, providing recommendations for cessation medications, reviewing
barriers to quit, and recommending smoke-free homes. Overall, after the program, nurses reported a significant increase in their ability to help smokers quit. However, at 3-months nurses who smoked were less likely to ask about smoking status (OR = 4.24, 95% CI [1.71, 10.53]), advise smokers to quit (OR = 3.03, 95% CI [1.24,7.45]), or refer patients to a quit-line (OR = 2.92, 95% CI [0.99, 8.63]).

A mini-grants program was implemented to support the local trainings in hospitals and other nurse-led activities on tobacco control in hospitals and communities. Sixteen mini-grants, ranging from US $250–3000 (median, $1600) were awarded.

**Sustainability and future direction.** The materials and training program for the workshop are now available to facilitate additional continuing education trainings in the Czech Republic. The network of nurses prepared to train staff nurses in brief smoking cessation interventions has been expanded, but as this is an important health problem in the country, ongoing support will be important to build upon the gains from this project and continue to multiply the number of nurses who are prepared to provide cessation interventions to their patients. The nurse champions continue to provide technical assistance as needed, maintaining and growing the network of nurses engaged in tobacco control.

As an unanticipated outcome of the original proposal, the Bristol-Myers Squibb Foundation granted e-cancer.org to film the workshop presentations, creating five learning modules: the tobacco epidemic, treating tobacco dependence, tobacco dependence-roots, diagnosis and high-risk groups, and smoking and oncology: the nurses’ role. These modules, translated from Czech into Polish, Hungarian, Romanian, Russian, and English, were accredited by the European Oncology Nursing Society for continuing education, and are available online (BMS Tobacco Cessation Eastern Europe, 2012).

These results suggest that nurses are eager to engage in tobacco control efforts. This brief educational program will enable them to play a significant role in accelerating the implementation of the WHO Framework Convention on Tobacco Control Article 14 on providing access to cessation treatment (WHO Guidelines, 2010). The success of this project led to funding for an additional grant, ‘Eastern Europe Helping Smokers Quit’ a tobacco control e-learning and toolkit program to be tested in the Czech Republic and Poland. This is the first program to test the feasibility and effectiveness of using e-learning to provide tobacco control and smoking cessation education to nurses in the Czech Republic and Poland and to address cessation interventions through culturally appropriate virtual education methods.

**Expanding the scope of practice for general practice nurses in health promotion, prevention and early detection of cancer**

The following four case studies describe projects in Russia, Poland and Hungary, which have built the capacity of nurses to promote prevention and early detection of cancer.

**Enhancing nursing practice and supportive care of patients with breast and intestinal cancer** (World Services of La Crosse, Inc.)

Sandra McCormick (World Services of La Crosse, La Crosse, Wisconsin, U.S.A.), Kelly Barton (Gunderson Health System, La Crosse, Wisconsin, U.S.A.), Natalya Biryukova (Balakovo Secondary Medical College, Balakovo, Russian Federation).

World Services of La Crosse, Inc. is a non-profit organization founded in 2001 in La Crosse, Wisconsin, USA. It began its international work in 1992 as a cooperative partnership between two local health care organizations and La Crosse’s Sister City program with Dubna, Russia. It has expanded its vision to become a leader in providing real-life experiences and sustainable solutions in the countries it serves. World Services of La Crosse, Inc. partnered with several US and Russia-based organizations to implement this project.

**Project description**

In common with other Organization for Economic Co-operation and Development countries cancer is the second highest cause of death in the Russian Federation with an age-standardized mortality rate of 180 per 100,000 (WHO European Region: Russian Federation statistics summary, 2002). In addition, according to 2011 data the Russian Federation has the 7th highest mortality rate from cancer among OECD countries (Health at a Glance, OECD Indicators, 2011). Late diagnosis of disease is common.

This project was launched as a partnership between World Services of La Crosse, Inc. and Gunderson Lutheran Health System of La Crosse, Wisconsin, U.S.A., and Balakovo Secondary Medical College, and the Municipal City Hospital of the city of Balakovo in the Saratov region of the Russian Federation. Saratov has a population of 2.7 million. Numbers of cases of new cancer are illustrated in Table 6 (Personal communication from project grantees with regard to Saratov and Balakovo regional and city statistics). Cancer incidence rates are similar to figures for the Russian Federation as a whole at 352 per 100,000 (Eucan Country Factsheets, 2012). In addition, as evident from Table 6, the percentage of patients presenting with late or stage IV disease is high.

In Balakovo itself, high rates of breast cancer are reported. In 2007 the rate of breast cancer was 85.2 per 100,000 population compared to average rates in Eastern Europe as a whole which average 47.7 per 100, 000 population (Globocan Estimated Cancer Incidence, Mortality and Prevalence, 2012).

Prior to this program, Balakovo Secondary Medical School had no specific cancer curriculum to prepare nurses for contemporary patient education and screening or to care for patients and their families. Patient and community education concerning cancer, as well as lifestyle issues related to cancer, were also minimal. Accordingly the three key goals of the project were:

- To enhance nursing skills in breast and colon cancer care
- To strengthen the nursing role in cancer prevention and education

**Table 6**

<table>
<thead>
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<tbody>
<tr>
<td>Total new cancer patients</td>
</tr>
<tr>
<td>--------------------------</td>
</tr>
<tr>
<td>Saratov Oblast 9503</td>
</tr>
<tr>
<td>Saratov City 3673</td>
</tr>
<tr>
<td>Balakovo District 907</td>
</tr>
<tr>
<td>Volsky District 382</td>
</tr>
</tbody>
</table>

**Table 7**

Comparison of public awareness about cancer at baseline and following public awareness campaigns in Balakovo.

<table>
<thead>
<tr>
<th>Survey component</th>
<th>Baseline</th>
<th>Repeat survey</th>
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<tbody>
<tr>
<td>Did not know that breast cancer was treatable</td>
<td>31%</td>
<td>18%</td>
</tr>
<tr>
<td>Did not know what mammography is</td>
<td>40%</td>
<td>12%</td>
</tr>
<tr>
<td>Did not know about self-examination for breast cancer</td>
<td>67%</td>
<td>10%</td>
</tr>
<tr>
<td>Did not know what colonoscopy is</td>
<td>75%</td>
<td>20%</td>
</tr>
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To increase community awareness regarding cancer prevention measures such as changing lifestyle and taking responsibility of own health

A comprehensive cancer training program was designed for nurses, including a specifically designed curriculum for Balakovo Secondary Medical School. Nurses currently working in community polyclinics and inpatient settings, as well as those providing palliative care and community education, were all initially targeted. Emphasis was placed throughout on colorectal and breast cancers. In order to secure buy-in, formal approvals for the program from both the Federal and local Saratov Ministries of Education and Health were obtained.

By the end of the first year (2011), Balakovo Secondary Medical College nurses established baseline data regarding awareness and knowledge about cancer among approximately 3500 nurses, nursing students and the general public. A number of public awareness campaigns were then undertaken in collaboration with the city’s Center for Preventive Medicine to provide information about prevention through lifestyle changes and to promote screening services. The survey of public awareness and knowledge was repeated in 2013.

At the midpoint of the program, nurse leaders from Balakovo conducted a site visit at Gundersen Lutheran Medical Center to receive additional training and observe the nursing roles at the Center. During the visit, the Russian delegation observed a care model involving the integration of care coordinators and nurse navigators. This exposure led to the project partners and nurse leaders drafting a proposal to adapt the nurse care coordinator model in Balakovo, which received approval from the Balakovo Municipal Health Administration, thereby expanding the scope of practice for nurses and enhancing nursing care for cancer patients through this project. Three city polyclinics have now introduced the nurse care coordinator role.

Project outcomes

Nurse training:
Three groups of 20–25 practicing nurses received the initial comprehensive training. Prior to training, the nurses were tested on key oncology nursing facts and obtained an average score of 49.6% across all questions. One year after the training, participants were retested on the same points and attained an average 95.5% correct response rate. Following the first training, approximately 200 nurses per year are now completing oncology training at Balakovo Secondary Medical School.

The introduction of the nurse care coordinator role led to improved coordination of care and increased communication among the health care team. The nurse care coordinators conduct review of records of patients currently receiving treatment to identify medical or psychosocial issues requiring further intervention. In addition, nurse coordinators can established outreach programs directly to patients. For example, at the city’s Urban Clinic No. 3, over 1000 patients with a family history of cancer have been scheduled for consultation and 226 at risk patients identified for cancer screening by either mammography or colonoscopy.

Increasing community awareness:
Selected key data from both the baseline and repeat survey of knowledge about cancer are displayed in Table 7:

Screening outcomes:
Although it is not possible to invoke a direct association with this project, it is noteworthy that between 2010 and 2012 (i.e. over the period of the project), there was a 20% increase in the number of women attending for mammography. Increases were observed at all age groups as illustrated in Fig. 3.

Sustainability and future directions

Steps taken to ensure sustainability included:

• Approval of the program by education and health authorities
• Integration of the cancer curriculum into the nurse training of Balakovo Secondary Medical College
• Signing of a written agreement between the University of Saratov, the Balakovo Secondary Medical College and World Services of La Crosse supporting continued mutual efforts in the area of health promotion
• Involvement of the Municipal Health Committee and physician leaders in order that the expanded nurse’s role would be understood and accepted
• A closing conference held in October 2012, attended by medical faculty and nursing teams from five other cities and the offer made by the Balakovo project directors to assist in project replication
The grantees have subsequently been awarded funding for two further projects. One is entitled, “Nurses in the General Practice Setting: A Model to Improve Cancer Detection in Russia’s Saratov Oblast.” This project is designed to restructure the roles and improve the skills of nurses working in community clinics with general practice physicians to better coordinate prevention, screening and appropriate referrals of patients diagnosed with cancer. Based on current and past work with Russia’s health system, it was determined that general practitioners would be the physician group most likely to adapt new practice patterns and support the development of an expanded nursing role. In addition, this strategy complemented a current initiative by the Russian Federation Ministry of Health to identify general practice physicians as responsible for overall management of patient health care (“Healthcare Development”, state program approved by the Russian Federation Government Decree, 2014). The second project approved is to develop the Balakovo Secondary Medical College – Saratov Oblast Center of Excellence, which will provide leadership, technical support and mentorship in oncology nursing to other centers in the Russian Federation.

Improving early detection and diagnoses of childhood cancer in five regions of Poland (Project HOPE – Poland)

Dorota Kuchna, Armine Hovsepyan (Project HOPE Poland, Warsaw, Poland)

Project HOPE Poland was established in 1997. However, its history of involvement in the country began in 1974, when the Polish Ministry of Health and Welfare invited Project HOPE to Poland, in order to provide assistance to the Polish–American Children's Hospital in Krakow. During the past 40 years, the Foundation has provided medical education programs for more than 6500 health professionals in Poland and provided over 700 fellowships for Polish health professionals in Western Europe and the United States. Project HOPE Poland was awarded this grant after successfully completing a previous program funded by “Bridging Cancer Care,” entitled “Multidisciplinary Case Management Training Program for the Care and Treatment of Pediatric Cancer in CEE Countries”.

Project description

Although childhood cancers account for no more than 2% of all cancers, they are a leading cause of childhood death. Despite recent favorable trends, mortality rates and survival from childhood cancers vary significantly between CEE and western European countries. Annual mortality rates are more than 1.5 times higher in CEE (4.9/100,000 boys and 3.9/100,000 girls) compared with Western Europe (3.1/100,000 boys and 2.5/100,000 girls) and five-year survival is significantly lower in CEE, 55% vs. 70% (Bosetti et al., 2010; Gatta et al., 2002). Overall trends in childhood cancer in Poland are similar to those in the rest of CEE, with mortality rates reaching as high as 5.4 per 100,000 population in some regions of the country (National Cancer Registry of Poland, 2014). These higher mortality rates are mainly due to diagnosis of childhood cancers in advanced clinical stages (III and IV). Less than 10% of children are diagnosed with stage I or II cancer, compared with 25% in Western Europe (National Pediatric Cancer Registry. Data provided as a personal communication by the MOH National Consultant for Pediatric Oncology and Haematology). In contrast to many adult cancers, childhood cancers currently cannot be prevented and mass screening programs are largely irrelevant. Consequently, increased awareness of possible warning signs of cancer among physicians, nurses and other health care providers, as well as among the general public, can have considerable impact on the outcome of the disease.

A two-year program was implemented to improve early detection of cancer in children by strengthening the role of community nurses and primary health care teams in pediatric oncology care through education on early cancer detection. In order to promote the importance of community nurses, physicians could only attend the trainings if they also brought a nurse. Partnerships between Project HOPE and the Polish Regional Oncology Centers were leveraged to develop the Centers into model/pilot education centers delivering support and training to pediatricians and primary health care providers. Each center also provided a team of “Master Trainers” consisting of two doctors, two nurses and the head of the oncology unit. The health professionals received train-the-trainer courses to prepare them to educate pediatricians and primary health care nurses on how to screen for pediatric cancer and how to provide parents and communities with updated information on childhood cancers. Project HOPE Poland also supported the Regional Oncology Centers and community nurses in conducting community health education campaigns in order to increase community awareness about the signs and symptoms of childhood cancer. Importantly, the program leveraged the key role that community nurses can play in the promotion of health education in their local communities. Overall, 1262 primary health care providers were reached in five provinces of Poland.

Project outcomes

Outcome 1: Promoting the early detection of childhood cancers: During the first 15 project months, three meetings of the program’s Senior Technical Advisory Group were held, giving input to program design, assisting with development of curricula and helping to establish contacts with the Ministry of Health and professional medical organizations for program advocacy and sustainability. The Senior Technical Advisory Group also developed evidence-based recommendations on early cancer detection for distribution to primary health care professionals.

Two curricula were created, one for training Master Trainers and one basic training for primary health care providers. The latter was accredited by five regional medical universities in Kraków, Lublin, Olsztyn, Poznań and Warsaw, such that participants receive six CME points.

Via a program website, an integrated network of health professionals was created, facilitating the exchange of information on early cancer detection among institutions at both tertiary level (Oncology Centers) and primary care level. The website can be accessed online (Program for the early detection and diagnosis of cancer in children, 2014).

The long-term outcome of earlier detection of childhood cancers will take some years to manifest given that it is dependent on the Polish National Cancer Registry. Consequently, at the suggestion of the Senior Technical Advisory Group, a sub-indicator was developed, namely duration from first symptom to hospitalization in a specialized oncology center. Project monitoring and evaluation data have demonstrated that 190 solid tumors and lymphoma cases were registered at all project sites and that the average time from first symptoms to hospitalization for treatment initiation decreased in 4 out of 5 project target regions. These positive findings cannot be definitively attributed solely to this project, but they occurred in the absence of other focused interventions in the regions involved. Based on this sub-indicator, it is hoped that positive changes in the proportion of cancers diagnosed at early stages will be observed in subsequent years.
Outcome 2: Improve primary health care workers' knowledge and skills on early diagnosis of childhood cancer and community education:

As planned, 25 Master Trainers completed the train-the-trainer workshop. Of these 20 responded to the post-training self-evaluation and 70% reported being “comfortable and able to perform with confidence” or “Somewhat uncomfortable but could perform adequately” concerning the early detection and diagnosis of childhood cancer on post self-evaluation test compared to only 10% on pre-training self-evaluation. Out of the 25 Master Trainers, five (one from each Regional Childhood Cancer Center) were assigned to develop information booklets on early cancer signs for the general public, evaluate and adapt the training curriculum and implement the primary health care professional training on a regional basis.

Subsequent to the master training a total of 1262 primary health care professionals have been trained during 33 sessions across the country. Improved knowledge on pediatric cancer early detection in the four regions of Kraków, Lublin, Olsztyn and Poznań was demonstrated on testing, increasing from an average of 25% pre-training to 84% post-training. Overall, 83.1% of the participants scored 75% or more at their post-training evaluation. The program was submitted for accreditation and accredited by each regional pediatric oncology center, affiliated with their respective medical universities. Each participant, doctor or nurse, was eligible to receive certification and 6 CME points.

Subsequent to their training, primary health care professionals in the Kraków region were assessed by regional consultants during 16 supervision visits to determine the extent to which they applied their newly acquired knowledge in the workplace. The results summarized below indicate that a significant proportion of the trainees undertook training inspired activities.

- 50% of nurses conducted 56 briefings for families and children at health care facilities or schools on cancer issues and the importance of early detection of cancer in children
- 63% of trained nurses carried out a total of 288 home visits
- 50% of trained nurses made a total of 256 family information charts, which are graphic representations of the family, its relationships and characteristics as well its key oncologic issues and social problems, adapted for family nursing purposes by Prof. Z. Krawczynska-Butrym from “the graphic record of the generations” originally created by Rakel (1977) family information charts
- 100% of trained nurses distributed community educational materials (leaflets and posters) among children and parents
- 100% of school-based nurses, supported by school teachers, conducted information campaigns on early detection of cancer in children.

Outcome 3: Raise public awareness about signs and symptoms of childhood cancer and the importance of early diagnosis and timely treatment:

A total of 1,257,948 community educational materials were distributed. In addition two community events were organized by the Childhood Cancer Education Program. The program consisted of two modules: Module 1 focused on epidemiology, early detection and diagnosis, and Module 2 covered contemporary cancer treatments, the role of community nurses during and after treatment and the management of physical and psychological side effects during cancer treatment. An important component of the training for the purpose of sustainability was that participants, grouped per institution or geographic area, were requested to develop “Dissemination Projects” designed to pass knowledge gained through the training to others in the trainees’ workplaces.

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Sustainability and future directions

The program was conducted using the existing infrastructure and human resources of the healthcare system. Sustainability of the program will be ensured in the following ways:

a. The validated and piloted curriculum, training and patient education materials along with evidence-based recommendations will be made available for healthcare professionals, institutions, academia and other stakeholders.

b. The train-the-trainer component in the first iteration of the program, and creation of the pool of Master Trainers, will enable participants to continue to roll out the training and effectively influence their colleagues.

c. Based on the above two elements, in the future it will be possible to roll out trainings in other regions through trainings of a similar structure, thus reaching more healthcare professionals.

Nurses for cancer patients (the Polish Amazons Social Movement, Poland)

Barbara Jobda, Elżbieta Kazik, Jolanta Ostrowska (Polish Amazons Social Movement, Warsaw, Poland)

The Polish Amazons Social Movement was founded in 2009 by a group of people with diverse professional background, including breast cancer patients, who decided to build capacity for cancer care within the Polish health care system. For this project the organization partnered with the Polish Association of Oncological Nurses.

Project description

This project focused on improving cancer prevention, early detection of disease and knowledge about current cancer treatment through an education program for community nurses. According to the 2009 EUROSTAT survey (Eurostat, 2009), Poland had one of the worst rankings for cancer mortality in Europe and cancer was the second most common cause of death in Poland. In 2009 the National Cancer Registry of Poland reported 138,000 new cases of cancer and 93,000 deaths due to cancer (National Cancer Registry of Poland, 2014). A contributing factor is that the disease is diagnosed too late in a high percentage of cases due to inadequate access to specialized health care, too few prevention and screening programs and a low level of knowledge of early cancer diagnosis among family doctors, nurses and the general public (Zatoński et al., 2009). With regard to nurses in particular, a survey conducted by the Laboratory of Oncological Education showed that they have limited knowledge about cancer epidemiology and treatment (The Polish Amazons Social Movement, personal communication).

The grantees for the current project decided that this indicated the need for education of nurses on prophylaxis and cancer detection. Community and public health nurses are often the primary contact with health care for patients and, therefore, educating these nurses could facilitate early detection.

In keeping with the Bristol-Myers Squibb Foundation’s aim of promoting health equity, the provinces targeted in this program were those reporting the highest incidence of cancer, having the lowest number of specialized oncology centers and the lowest number of employed nurses. Community and public health nurses from small cities and villages with limited access to specialists were given priority. The trainings were led by specialists, including oncologists, an oncology nurse, an oncology psychologist, an epidemiologist and a dermatologist. The program consisted of two modules: Module 1 focused on epidemiology, early detection and diagnosis, and Module 2 covered contemporary cancer treatments, the role of community nurses during and after treatment and the management of physical and psychological side effects during cancer treatment. An important component of the training for the purpose of sustainability was that participants, grouped per institution or geographic area, were requested to develop “Dissemination Projects” designed to pass knowledge gained through the training to others in the trainees’ workplaces.
Project outcomes

As planned, 400 primary health care nurses and obstetricians from eight provinces were trained. A test consisting of fifteen questions was administered to check the knowledge level of participants at the beginning and at the end of the training. At the pre-test the percentage of correct answers was 55.8%, compared to 86.5% at the post-training test. Subsequent to the training, participants sent 146 proposals for “Dissemination Projects” to The Polish Amazons Social Movement. Plans included talks and educational lessons to be given to co-workers, patients and their families, 21 projects dealing with nutrition during and after cancer treatment, fliers for patients explaining how to manage side effects of cancer treatment, two projects describing testicular self-examination and significantly, 67 projects educating women how to conduct breast self-examination. Breast self-examination techniques have since been demonstrated to 1119 women.

In addition, nurse leaders were selected in each of the targeted provinces to run a virtual education and information center which community nurses can contact with questions. Support is provided via e-mail, telephone and e-learning. The nurses participating in the trainings were also informed about another existing service, an e-clinic run by the Polish Amazons Social Movement, which allows cancer patients to pose questions to health professionals by email or telephone.

Sustainability and future directions

Subsequent to this program, the Polish Association of Oncological Nurses is now preparing an innovative model of oncological education for community and family nurses, which can be rolled out across the country including the eight provinces not covered by the original project. It is hoped that longer term the program will be shown to have a beneficial impact in terms of a greater number of patients seeing specialists as a result of earlier detection of disease and ultimately in terms of reduced mortality rates from cancer. These data will, however, take some years to materialize and become manifest in the Polish National Cancer Registry.

Needs assessment, cancer screening and case management of the segregated, underserved population in Hungary (Hungarian Hospice Foundation, Hungary)

Katalin Muszbek (Hungarian Hospice Foundation, Budapest, Hungary), Eszter Biró (Loránd Eötvös University, Budapest, Hungary)

The Hungarian Hospice Foundation was founded in 1991 with the primary goal of making the final period in the lives of cancer patients acceptable and worthwhile. Basic activities of the Foundation include adequate pain control, the preservation of the dignity of patients and psychological support of their families.

Project description

This project targets highly segregated populations of Hungary, in particular the Roma population. Roma people constitute approximately 5% of the population of Hungary. Studies have shown that these populations have a 1.8 times higher rate of cancer incidence than the general population (Babusik and Papp, 2004). The disparity in access to healthcare for these populations compared to the general Hungarian population is determined by both economic and cultural factors (Csepeli and Simon, 2004). Many Roma people live in conditions of severe poverty and are subject to high levels of discrimination. In addition, as a result of their isolation, inbuilt cultural beliefs and lack of knowledge about the potential benefits of cancer screening and subsequent treatment, their eventual health outcomes are inferior.

The current project builds on another previously funded by the Bristol-Myers Squibb Foundation. A key finding of the pilot project was that Roma participants who had been visited by public health nurses were more likely to access cancer screening. The objective of the second project was to improve access to both cancer screening and subsequent care and treatment for the Roma population. As such it met the Bristol-Myers Squibb Foundation’s primary criterion of promoting health equity for populations disproportionately affected by disease.

The first key project component was an innovative 20 h training covering medical, cultural and legal aspects related to cancer for general practice and public health nurses. Volunteer workers were also included in the training and became peer educators. The training has been accredited by the institute named GYEMSZI ETI, responsible for continuing education in Hungary, and earns 20 accreditation points. Thereafter, the project aimed to coordinate action by the trainees within the healthcare system, as well as with patients’ organizations and legal aid organizations working with segregated groups. To this end, fieldwork including home visits was carried out in 34 districts, with a total population of 382,100, for a period of three months per district. Members of the Roma population were accompanied by nurses and volunteers to access screening services, and those diagnosed with cancer were subsequently referred for care and treatment including palliative services. Longitudinal follow up was also organized by the teams. A further element of the project is a survey carried out among Roma populations to assess attitudes and knowledge about cancer as well as to document their socioeconomic status.

Project outcomes

The population survey was administered to 150 Roma families. Key findings underlined their disadvantaged profile with 100% judged below the poverty line, 23.3% with less than primary education, 58.1% unemployed, 23.3% living without running water and 26.6% with no toilet. Overall 44.8% had never attended any form of cancer screening compared with only 19.4% among a representative sample of the general population.

Three successful two day trainings were carried out in the three cities of Budapest, Kaposvár and Debrecen, involving 46 professional and 18 lay healthcare workers. The participants reported greater understanding of the health status, culture, customs, challenges and needs of the Roma population. The second project was to improve access to both cancer screening and subsequent care and treatment for the Roma population. As such it met the Bristol-Myers Squibb Foundation’s primary criterion of promoting health equity for populations disproportionately affected by disease.

This was followed by field work which involved visiting Roma families, having consultations on the importance of cancer screening, assessing and understanding personal motivation and possible difficulties, conveying information concerning screening possibilities, maintaining an accurate and anonymous record of all people involved in the project (women older than 25 and men older than 50 years) and eventually organizing the screening for eligible individuals. As a result a total of 1368 individuals were assessed and of these 632 underwent subsequent screening for cancer. Including family members, it was estimated that close to 7000 people were reached through the program in terms of greater cancer awareness.

Sustainability and future directions

Together with the Association of Healthcare professionals, a nationwide conference was held on September 2012 in Budapest for family nurses concerning the importance and methods of involving poor and disadvantaged people in cancer screening programs. The project was further publicized by means of press conferences, television and radio programs, newspaper articles and internet sites, reaching an estimated 450,000 individuals.
The program has resulted in a significant change in standard of care. The success of involving nurses has led the National Public Health and Medical Officer Service to initiate a new national program, which will train 1300 family nurses in promotion of cancer screening in rural areas.

Capacity building for nurses in contemporary models of cancer care, care navigation and psychosocial support

The following case studies describe three Romanian projects, which implemented innovative, nurse led models of holistic care for patients with cancer.

Cancer care capacity building for nurses in Romania (Romanian Cancer Society — Romania)

Adriana Melnic (Romanian Cancer Society), Ioana Gădălean, Florina Pop (Oncology Institute Prof. Iona Chiricuța, Cluj Napoca, Romania)

The Romanian Cancer Society is an NGO established in 1993 in Cluj Napoca in order to address the lack of information among the general population regarding cancer prevention and early diagnosis as well as inadequate support services outside hospital.

Project description

Patients in Romania are often not diagnosed until the later stages of the disease, one of the factors contributing to the overall cancer related mortality rate in Romania being 20% higher than the world average (World Cancer Research Fund International, 2012). Standardized mortality rates for malignant neoplasms have also risen markedly since the revolution in 1989 from approximately 150 per 100,000 people to over 180 per 100,000 (WHO, European Health for All Database, 2014). The Romanian Cancer Society was awarded a Bristol-Myers Squibb Foundation grant to train nurses in six counties of Romania on prevention, early diagnosis, treatment guidelines and follow up for stomach, colon and melanoma cancers. The project was aimed at nurses because they can be involved in all aspects related to awareness, prevention and cancer care in the community.

Rural communities were targeted because they especially lack access to education about cancer screening programs and cancer treatment. Patients in rural areas also do not have information about other available programs available such as psychological counseling, accommodation for family members near treatment centers and social assistance programs. The region targeted was predominantly rural and included remote areas that have very limited access to elementary health care services as well as very poor communities and underprivileged ethnic minorities, among whom cancer incidence is very high. Stomach, colon and melanoma cancers were chosen due to high incidence rates in the region, coupled with lower education and general awareness about these particular cancers (North-Western Cancer Registry, Romania, 2008).

The objectives for the project:

1. Provide theoretical training for 400 nurses from rural areas in the North West region of Romania (6 counties: Bihor, Bistrița-Nasaud, Cluj, Satu-Mare, Salaj, Maramureș) on prevention, treatment and follow-up in gastric, colorectal and melanoma cancer
2. Increase information level for 12,000 people through sessions organized by each nurse in their community
3. Create a website and virtual community for the nurses trained in the project offering free information and advice.

Each of the nurses attending the initial trainings is thereafter expected to set up informative sessions for members of their community. These sessions are organized in villages with support from local general practitioners, mayors, social workers, priests, school principals and teachers.

Project outcomes

This project was the first one in Romania to address nurses in this manner through specific trainings on cancer issues and recognition of their role in cancer prevention. Initially as planned the training course and promotional materials related to melanoma and gastric and colon cancer were prepared and the first training course took place in Cluj in April of 2012. During this course and at meetings with representatives of local health authorities, the need to extend to a wider cancer prevention program became evident.

After agreement from Bristol-Myers Squibb Foundation, the team consisting of representatives from the Cluj Oncology Institute, the Local Health Authority and the Romanian Cancer Society proceeded to develop a brochure and guidelines regarding cancer prevention in general. This was based on the European Code against Cancer (European Code against Cancer, 2014).

The revised approach also included a smoking session component and training for nurses concerning the new cervical cancer screening program launched by the Ministry of Health in Romania in July of 2012. The latter is particularly important because Romania has the highest death rate from cervical cancer in the whole of Europe. In 2006, the crude mortality rate was 20.9 per 100,000 women (GLOBOCAN, 2008, Cancer Incidence and Mortality Worldwide). According to the 2004 Romania Reproductive Health Survey, “more than 80 percent of sexually experienced women have never had a Pap smear test for cervical cancer and 37 percent say they have never heard of the test.” The situation is particularly difficult in rural areas, where “nine out of ten women have either never heard of the Pap test or have heard of it but never had the test” (Romania Reproductive Health Survey, 2004).

Following this change in direction, thirteen training courses have been completed in the six target counties with a total of 818 nurse participants. The training was heavily supported by local health authorities and local communities and has been approved as part of nurses’ Continuous Medical Education, providing 15 continuous medical education credits. The attendees then began working with patients on a one-to-one basis with people within their communities. IEC materials have also been created, including flyers, posters and patient booklets. In total, 21,940 members of the general public have been reached during presentations by nurses in their communities and 20,000 IEC materials have been distributed.

Sustainability and future directions

In terms of sustainability, it is anticipated the nurses trained will remain reliable sources of information in their communities. The village support groups will become more aware of their part in promoting health and more open to collaboration with non-profit organizations. Informed patients will become resource-persons who will spread further the information they have acquired. The website for nurses will remain an important resource available for at least three years after the project has ended.

Adaptation and implementation of the U.S. Model of the Oncology Nurse Navigator in Romania (National School of Public Health, Management and Professional Development, Romania)

Carmen Angheluta, Teodora Cioclopia, Georgeta Popovici, Carmen Sasu (National School of Public Health, Management and Professional Development, Bucharest, Romania)

This project brought together two professional institutions, one specialized in public health, health promotion, medical management, research and training (National School of Public Health,
Health Management and Professional Development) and the other in nursing (Romanian Nurse Association).

Project description
Cancer is the second leading cause of death in Romania (WHO European Region: Romania statistics summary, 2002 to present). In 2010 the Romanian Ministry of Health allocated 220 million Euros nationally for cancer care through the National Program for Oncology. From this amount 150–170 million Euros are used each year for treatment. Only a small amount is invested in patients’ follow up and there is no regulation with regard to community-based continuity of medical services and psychological support for patients or families.

The two project institutions aimed to produce an innovative care model for cancer patients: the oncology Nurse Navigator model originally developed in the USA (Academy of Oncology Nurse Navigators, 2014). It was considered that such trained Nurse Navigators could fill some of the existing gaps in the treatment system, being able to talk on behalf of patients and their families, while working collaboratively with family physicians, surgeons, radiation oncologists, medical oncologists, radiologists, pathologists, dietitians, social workers and other health professionals from the patients’ own communities.

The project involved nurses from oncology treatment units and key persons from economically undeveloped communities in the region of Oltenia in southwest Romania learning to work together more efficiently for patients with inadequate access to quality medical services. The overall project goal was to improve chances for cancer patients to access quality inpatient care and ambulatory services as well as ensuring continuity of care in the patient’s community.

The project began with a study performed by the National School of Public Health, Management and Professional Development concerning cancer services in Romania from prevention to treatment, accessibility to these services by persons living in economically undeveloped areas, together with a description of the most frequent types of cancers by gender, age and geographic location. Under supervision of an expert in oncology nursing from the United States, the two institutions involved in this project then developed a curriculum and training manual for the oncology clinical nurse navigator and a model of integrated quality services for oncology patients from economically undeveloped areas. The resulting training certificate for nurses is issued by the National School of Public Health, Management and Professional Development and the Order of Nurses Romania and provides 15 accreditation points.

Project outcomes
The initial needs assessment study has been completed (Vladescu et al., 2012). The report was based on national and international literature review, quantitative analysis of existing national databases, cancer registers and questionnaires completed by patients, oncology nurses and doctors on hospital wards. Nurses were instrumental in the conduct of this research. The report provided a comprehensive picture of cancer in Romania from an epidemiological and medical perspective. In addition, the qualitative and quantitative information from Oltenia constituted a sound situational assessment, which permitted the design of the next stage of the project. The following were the main conclusions supporting the proposed model of care and curriculum:

a) The south west region of Romania has significant socio-economic problems:
- Life expectancy of the population is lower than in other regions
- High unemployment, extensive migration of the active population to Western countries with resulting broken families, children left in the care of elderly relatives, reduced social support for aging population, low income and poor education
- Medical services deficient due to lack of doctors and nurses who have migrated to Western Europe
- Increasing cancer incidence rates: from 175 cases/100,000 population in 1995 to 275.5 cases/100,000 in 2010
b) The principal issues identified by the study:
- Poor patient information and knowledge about cancer in general, oncologic risk factors, methods of preventing the disease, screening, signs and symptoms
- Inadequate counseling services for cancer patients on treatment compliance and guidance on how to easily access health services
- Inadequate home care
- Inadequate community care
- Problems with diagnosis and treatment related to poor equipment for diagnosis and treatment, deficiencies in drug supplies and lack of integrated services for cancer patients
- Lack of participation by healthcare professionals in continuing professional development programs
- Inadequate palliative care and recovery services.

The above results informed the design of the rest of the program as follows. The issues related to equipment for diagnosis and treatment, drugs and inadequate staff levels require intervention by the Ministry of Health and the National Health Insurance. However, at a local level improvement of the services could be proposed by improving the organization and the skills of the nurses working with oncological patients.

The nurse navigation model for Romania is directed at three levels of care: family medicine, outpatient care and hospital specialty care. The expected patient results are:
- Improved access to specialized services
- Increased patient education
- Improved early detection
- Improved quality of services
- Improved patient satisfaction
- Improved patient quality of life

Training modules for Nurse Navigator were adapted for the Romanian health system and are illustrated in Table 8.

Table 8
Nurse navigator training modules.

<table>
<thead>
<tr>
<th>Module</th>
<th>Description of the Oncology Nurse Navigator Model</th>
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<tbody>
<tr>
<td>Module I</td>
<td>Communication:</td>
</tr>
<tr>
<td></td>
<td>a) with cancer patients and their families</td>
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<tr>
<td></td>
<td>b) local cultural aspects related to cancer</td>
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<tr>
<td></td>
<td>c) advocacy on patients’ behalf</td>
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<tr>
<td></td>
<td>d) team work, team communication and networking</td>
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<tr>
<td>Module II</td>
<td>Ethics in Oncology</td>
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<tr>
<td>Module III</td>
<td>Health promotion and health education on cancer issues</td>
</tr>
<tr>
<td>Module IV</td>
<td>Organization of the workplace and available resources</td>
</tr>
<tr>
<td>Module V</td>
<td>Specialized oncology nursing</td>
</tr>
<tr>
<td>Module VI</td>
<td>Coping skills for patients and families</td>
</tr>
</tbody>
</table>

These modules were supplemented by a kit of informative materials for prevention for the ten most frequent types of cancers in Romania. Two training sessions were conducted, the first with 63 trainees and the second with 44 trainees. At post-training testing, 80% of the trainees obtained a result of over 90% and the remaining 20% obtained over 70%. It is hoped that this will translate into improvements in cancer care in the longer term.
Learn, share, live better (Partners in Progress Association, Romania)

Ady Lupascu, Cornelia Iacob, Luminţi Lupascu (Partners in Progress, Constanta, Romania), Laura Mazilu (Constanţa County Hospital, Constanţa, Romania)

The Partners in Progress Association is an NGO based in Constanţa, Romania. Since 2001 it has coordinated several programs to improve the lives of people in difficulty (“Patient’s Friend”, “Orphans are our children”, “Together for a better life”).

Project description

This project involved an innovative model designed to educate community nurses and form partnerships between nurses, librarians and patients in two counties in Romania in order to improve the quality of life for cancer patients in general and women with breast cancer in particular.

The Romanian Ministry of Health lacks the funds it would like to improve the quality of life of patients with cancer. Many cancer survivors in Romania have little or no access to health services for various reasons: lack of training for non-specialist community nurses, lack of cancer-related organizations and volunteers, lack of community awareness, and insufficient information about patients’ rights. The counties targeted in this project, Constanţa and Tulcea, represent 5% of the total Romanian population, with 45% of inhabitants living in rural areas with limited access to medical care (Romanian population by sex and area (rural/urban), 2007). There are only two hospitals in the region with oncology departments. Annually 3100 cases of cancer are diagnosed (Romanian Cancer Registry, 2009). However the Biblionet National Program funded by the Bill & Melinda Gates Foundation provided a new opportunity to improve access to information for cancer patients. The Biblionet National Program aims to facilitate public access to the internet through large scale modernization of public libraries in Romania. Over 1600 public libraries are receiving computers for public access to the internet.

Project outcomes

Development of a training curriculum and core competencies for professional, non-specialist community based nurses:

The training curriculum was based on the oncology course taught at the University of Constanţa and requires 20 h for administration. The course has been validated by the National Nurses Association and has been awarded 32 medical education credits. As planned, in total 120 community-based nurses were trained. The online resource database has been created and 143 nurses and other healthcare professionals are accessing it. Forty-two of the trained nurses are participating in patient support groups. Most of nurses participating in the project (76%) work in rural areas. They have reported that the training helped them improve the level of care they provide to patients from poor, rural areas, who have little means to seek specialized care. Patients have easier access to the nurses as most of their family doctors are only commuting for limited periods of time to the villages.

Establishment of partnerships with six local libraries:

Following establishment of ten such partnerships, the main activity consisted in selection of reliable information resources concerning cancer. To this end a team of experts studied oncology materials. In total 37 websites were studied and 1367 pages of information were researched, translated and adapted. Web pages specifically for patients and caregivers were also created. In contrast to the original target of ten, by the end of the project thirty-two librarians were trained, the majority from rural areas. They were educated on how to navigate the website and provide correct information to their readers. It has been estimated that 54% of Romanians do not use computers. In villages in particular, very few people own a computer or know how to navigate the internet. Disparities in accessing information concerning cancer have been reduced through education of the librarians. Information on the website for patients and caregivers was posted using simple Romanian language and the site was designed to be user friendly, specifically to facilitate usage by people of lower education level. A total of 489 healthcare professionals and 1467 patients had accessed the website as of 15th October 2012.

Establishment of at least six support groups in partnership in collaboration with the local libraries:

Six support groups are now active with 40 nurses, 57 volunteers and 80 patients participating. It is anticipated that a total of 250 patients will become involved by the end of 2013.

Development, printing and distribution of a “Cancer Patient Guide”:

A total of 2000 copies of this guide have been printed and distributed to patients, primary caregivers, family physicians and oncology departments.

Sustainability and future directions

In terms of sustainability, important assets for the future are in place including 50 trained volunteers, 120 trained nurses, the patient cancer website, networks of support groups and information points in libraries. This will allow continuation of better nursing care for patients in the community, support group activities and, for an indefinite period of time, the website to strengthen patients’ networks and provide a new channel of communication between patients and caregivers. In addition, Partners in Progress will also share the model, including goals and results, with local government and local nongovernmental organizations and the training curriculum will be shared with other NGOs throughout Romania.

Establishing nurse training programs in Palliative Care in CEE

The following case studies describe “Bridging Cancer Care” funded projects aimed at building nurse capacity in the provision of palliative and end-of-life care for cancer patients.

Implementing the evidence-based national education initiative, the end-of-life nursing education Consortium (ELNEC), to improve palliative care in CEE (Beckman Research Institute of City of Hope, U.S.A.)

Pam Malloy (American Association of Colleges of Nursing), Rose Virani, Betty Ferrell (City of Hope, Duarte, California, U.S.A.)

In conjunction with the Beckman Research Institute, City of Hope has been at the forefront of medical and basic science research since its establishment in 1918. City of Hope is recognized worldwide as a leading research and treatment center for cancer, diabetes and other life-threatening diseases. Designated as a comprehensive cancer center, the highest recognition bestowed by the National Cancer Institute, City of Hope is also a founding member of the National Comprehensive Cancer Network.

Project description

The ELNEC project began in 2000 as a U.S.-based palliative care educational initiative for nurses. The project is a partnership between the American Association of Colleges of Nursing (AACN) and City of Hope and continues its mission today. The goal of the project is to improve palliative care through specialized nurse training, utilizing curricula customized for different patient types and clinical settings. Each curriculum contains eight modules: Introduction to palliative nursing, pain and symptom management, ethics, cultural considerations, communication, loss/grief/bereavement and
final hours. ELNEC training outcomes have been published in several peer-reviewed journals (Ferrell et al., 2010; Ferrell et al., 2005; Paice et al., 2008).

Adaptation of the initiative to CEE involved a partnership between the Beckman Research Institute of City of Hope, the Open Society Institute and the Bristol-Myers Squibb Foundation. The need was considerable in CEE where, with the exception of Poland, palliative care services were inadequate compared with Western Europe (Centeno et al., 2007). In addition there was a lack of specialized training for nurses in palliative care and insufficient appreciation by the Ministries of Health and physicians of the crucial role nurses can play in this respect.

For the first part of the project, funded by the Open Society Institute, nursing leaders from the Czech Republic, Hungary, Poland, Romania and Russia attended an ELNEC train-the-trainer course in Salzburg, Austria. Trainees also received educational materials for future use in schools of nursing and clinical settings. For the second part of the project, the Bristol-Myers Squibb Foundation provided funding to support the nurse leaders in holding two-day trainings for other nurses in their home countries. ELNEC trainers from the U.S. acted as mentors, providing guidance on planning and implementation of each nurse training session.

**Project outcomes**

Given the paucity of training resources in CEE regarding palliative care, the project brought immediate benefits. The provision of the ELNEC curricula meant that each country did not have to develop their own materials.

Thirty-three nurses from the five countries attended the initial training in Salzburg. Thereafter, the trainees from Romania, the Czech Republic, Hungary and Russia organized courses in their own countries, which trained a total of 397 nurses. After receiving ELNEC training, each participant is presented with a certificate that shows they have completed all modules and are now qualified to teach others.

**Sustainability and future directions**

By October 2012, further trainings had taken place leading to an additional 1034 nurses trained across the region. New funding has also been secured in the various countries from the Open Society Foundation, the Princess Diana Fund and in-country hospices, palliative associations and medical associations. Collaboration with the Hospice Casa Speranței in Brașov, Romania, was especially successful and has lead to additional funding from the Bristol-Myers Squibb Foundation for a new, two-year project entitled, “Nursing Excellence for Underserved Populations in Romania”, described in detail Educating and developing Central and Eastern European oncology nursing leaders in Palliative Care and providing basic Palliative Care education to nurses in rural areas. Many additional ELNEC courses have been organized within each country with a total of an 786 more nurses trained to date.

**Educating and developing Central and Eastern European oncology nursing leaders in Palliative Care and providing basic Palliative Care education to nurses in rural areas (Hospice Casa Speranței, Romania)**

Nicoleta Mitrea, Camelia Ancuța (Hospice Casa Speranței, Brașov, Romania), Daniela Mosoiu (Transylvania University, Brașov, Romania)

Hospice Casa Speranței is a Romanian NGO whose mission is to develop a complex palliative care service in various settings and to contribute to the national development of palliative care services for adults and children with incurable diseases in advanced and terminal stages. Hospice Casa Speranței is internationally recognized in the field of palliative care services and education and identified as one of five centers of excellence in palliative care by a study conducted of over 475 services in 28 countries in Central and Eastern Europe, countries of the former Soviet Union and Central Asia (Clark and Wright, 2003).

**Project description**

The roll out of the ELNEC project (see Section Implementing the evidence-based national education initiative, the End-of-Life Nursing Education Consortium (ELNEC), to improve palliative care in CEE (Beckman Research Institute of City of Hope, U.S.A.)) in CEE was especially successful in Romania, leading to the award of additional funding from Bristol-Myers Squibb Foundation to Hospice Casa Speranței.

According to the European Association for Palliative Care (EAPC) guidelines for developing palliative care education in Europe, there are three levels of nursing education: A- Basic; B- Advanced; C- Specialist (European Association for Palliative Care, A Guide for the 81 Development of Palliative Nurse Education in Europe, 2004). A standardized curriculum in palliative nursing for level B education had already been developed for CEE, adapting the ELNEC materials and resources. The newly funded project focused on two distinct levels of palliative nursing, namely rurally based nurses and nursing leaders, and two corresponding curricula for levels A and C were developed. Both curricula also pay particular attention to pain control. Many years of restrictive guidelines and practices have left health care providers, pharmacists, family members and patients themselves suspicious of opiates used for pain relief (Mosoiu et al., 2006) A Romanian national study conducted by Hospice Casa Speranței in 2007 revealed that 71% of caregivers identified the need for greater access to analgesic medication (Personal communication from Hospice Casa Speranței: Romanian National Survey of caregivers, 2007).

The first component of the project was designed to train and empower nurse leaders, service developers, organizers and advocates for palliative care nursing. The new level C curriculum encompasses the following leadership elements:

- Overview of Palliative Care in the Region
- What is a leader? Leadership in the nursing field
- Challenges and opportunities for leaders
- Presentation skills
- Communication: negotiation and feedback
- Self-awareness. Circle of influence
- Review goals/projects
- Change management — being able to adapt to internal and external changes
- Mentorship
- Conflict resolution
- Teamwork and Team building
- How to motivate other people: Leadership practices
- Burnout. Self care
- Advocacy: Social media
- Participants’ reports on their projects/goals

The program includes monthly mentoring via Skype for 12 months. Nurses graduating the program will actively promote the advancement of palliative services and nursing education development in their countries.

The second component of the program responds to the needs of rural nurses and carers. Since 2009 Hospice Casa Speranței has addressed the increasing demand for services in rural communities surrounding Brașov, the main city in this part of Romania. Two palliative home-based care teams were established in the rural areas of Zarnesti and Făgăraș, where four years experience has
revealed specific needs of patients with cancer, due to lack of continuity of care after discharge from hospitals and during the final stages of disease. Family practice nurses are frequently the only professional personnel visiting patients in their homes. Empowering nurses to approach incurable cancer patients with appropriate abilities and skills could, therefore, be an affordable way to rapidly improve patients’ quality of life. To this end, Hospice Casa Speranței created adapted Level A curriculum (European Association for Palliative Care, A Guide for the Development of Palliative Nurse Education in Europe, 2004) in order to increase palliative care awareness, knowledge and skills among nurses and caregivers in rural areas.

**Project outcomes**

Outcomes relative to the first component of the project include the successful completion of the first five day nurse leaders workshop entitled “Transformational Leadership: Empowering Palliative Care Nurses to Enhance the Quality of Care for Patients with Complex, Life Threatening Illness and their Families.” The workshop was held in September 2013 in Brașov, Romania, and was attended by 64 nurses. Participants also developed their own leadership programs to be implemented over the subsequent 12 months at their own workplaces. A research nurse has been employed to conduct focus groups and qualitative surveys at six and twelve months in order to determine the extent to which trainees apply newly acquired skills and knowledge in the workplace.

Outcomes relative to the second component of the project include fourteen pilot sites being identified and 763 nurses (community nurses, family practice nurses and some specialist nurses) and 86 caregivers being trained. Trainees completed tests consisting of twenty key questions about palliative care. The pre-training result for 455 trainees was 52.2% compared to 78.9% after training. Sixty-four of the nurses subsequently progressed to completion of the advanced curriculum B. Pre-training test results for 48 of these trainees on advanced palliative care averaged 49.7% compared to 95.4% post-training.

**Sustainability and future directions**

By the end of the project, legal improvements in nursing palliative care education and recognition of the newly developed Hospice Casa Speranței training curricula are expected at national level. The Ministry of Health has already incorporated the new curriculum A and B into training for future community nurses. In addition the program is planning a regional Center of Excellence, called the Palliative Nursing Institute based in Romania, which will provide leadership for emerging palliative care nursing leaders in Romania, the Czech Republic, Hungary, Poland and Russia. It will also support the development of palliative care through advocacy and improving legislation in the region. Hospice Casa Speranței is currently cooperating with the Ministry in developing the National Program for Palliative Care.

**Key specialist nurses for children and young adults with cancer: the “Dragoș Nurse” Project (Hospices of Hope, United Kingdom)**

Graham Perolls, (Hospices of Hope, Otford, United Kingdom), Malina Dumitrescu, Florentina Baltag (Hospice Casa Speranței, Brașov, Romania)

“Hospices of Hope” is a UK-based NGO that has been pioneering specialist care for adults and children with a terminal, life-threatening or life-limiting illness in the poorly resourced countries of southeast Europe since 1992. The charity has four main objectives: advocacy, technical expertise, training and funding, and accomplishes its goals by partnering with in-country NGOs.

**Project description**

This project is being implemented by Hospices of Hope in collaboration with the local partner Hospice Casa Speranței. Children and young adults in Romania suffering from a life-threatening illness such as cancer suffer from uncoordinated care planning, paucity of resources, medications and treatments, lack of home-based services and of counseling, psychological, spiritual and social support. There are currently around 5000 such children and young adults (9.1 cases per 100,000 children) and 500 new cases per year. Cancer is the second cause of death in the 4–15 age range. The cure rate is 30–60% depending on the type of cancer (Vrdoljak et al., 2011; Press release at the National Pediatric Oncology Conference, 2011, based on statistics provided by the International Conference of Childhood Cancer Parent Organizations). Consequently many young patients eventually require palliative care, currently available for only 6% of the population (Directory of the Palliative Care Services in Romania, 2012).

The project goal is to pilot and develop a new model of nursing care involving a key specialist nurse, known as a Dragoș Nurse. Dragoș means precious in Romanian and this title was chosen in memory of a brave young Romanian, named Dragoș who suffered and died from angiosarcoma. The project will train and deploy three such nurses, whose role is to ensure the provision of seamless and holistic support across care settings to meet the needs of children and young people with advanced cancer, together with support and guidance for their families and carers. The Dragoș Nurses collaborate with children’s hospitals in Bucharest, but also travel extensively to patients’ homes. Key responsibilities of the Dragoș Nurses include implementation of individualized care plans, which coordinate across specialist and local health care providers, including end of life care if needed. The latter may involve direct provision of palliative care and symptom control advice. Providing effective pain control is a key component of this program given the current inadequacy of this service in Romania.

**Project outcomes**

Although the project has only been operational for 12 months, it has already achieved significant results. The project team has been comprehensively trained and 50 doctors and nurses have attained indirect training on the project. Trainees receive an accreditation certificate entitled “Palliative Care for Terminally Ill Patients.” Protocols for treatment of symptoms associated with cancer and chemotherapy have been posted in all partner hospitals together with a first handbook in Romanian entitled “Nursing Handbook for Palliative Care.” A total of 130 patients have been enrolled and 104 of these have received palliative care. According to monitoring and evaluation data, pain control has been effective in more than 90% of these patients. Support or counseling has been provided to 239 family members. A total of 102 patients have received help to gain social rights. The project has assisted family members to take an active role in the patient’s care and encouraged many volunteers to come forward. Based on the impact of the project to date, the team is already working with the Ministry of Health on the National Plan for Palliative Care, which will include the Dragoș Nurse concept.

**Conclusion**

The positive results of the “Bridging Cancer Care” project were predominantly achieved through enhanced nurse empowerment, supported by the development of 17 different, customized and
nurse-focused curricula. Such training can increase nurses’ knowledge and skills as demonstrated by examination testing and evaluation of nurses in the workplace. Several projects also resulted in enhanced nurse leadership attributes and eleven lead to positive changes in models of clinical or community care involving nurses. In eight cases, these changes were subsequently embodied in new health policies. Based on the exceptional success of three of the projects, the Bristol-Myers Squibb Foundation has now awarded additional funding to these grantees for the establishment of three Centers of Excellence. These three projects were distinguished by their demonstration of leadership, exceptional capacity building of nurses, resulting improvements in access to care and changes in standards or models of care, implications for health policy and successful sustainability or replication. Thus, the International Society of Nurses in Cancer Care has been awarded funding to develop The Eastern Europe Nurses’ Centre of Excellence for Tobacco Control, which will replicate the success of the existing nurses project in Czech Republic, disseminating strategies to implement evidence-based practice in other countries in the region. World La Crosse has received new funding to establish the "Cancer Care Nursing Practice Center of Excellence” project, which will leverage experience gained at the Balakovo Secondary Medical College and in Balakovo to expand services in the Saratov and Moscow regions. Hospice Casa Speranței will create a Center of Excellence in Romania leading and supporting enhanced palliative care throughout Romania and other selected Eastern European countries.

Conflict of interest

Funding of the projects described in this supplement was provided by the Bristol-Myers Squibb Foundation. John Damonti and Catharine Grimes are employees of the Bristol-Myers Squibb Foundation and are in receipt of stock options from the Bristol-Myers Squibb Company. Richard Sebastian Wanless is a paid consultant of Bristol-Myers Squibb Foundation. None of the authors of the case studies have conflicts of interest.

Acknowledgments

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Stella Bialous, Linda Sarna (University of California, Los Angeles, U.S.A.), Sarah McCarthy (ISNCC).
Sandra McCormick (World Services of La Crosse, La Crosse, Wisconsin, U.S.A.), Kelly Barton (Gunderson Health System, La Crosse, Wisconsin, U.S.A.), Natalya Biryukova (Balakovo Secondary Medical College, Balakovo, Russian Federation).
Dorota Kuchna, Armine Hovsepyan (Project HOPE Poland, Warsaw, Poland).
Barbara Jobda, Elzbieta Kozik, Jolanta Ostrowska (Polish Ama-
szos Social Movement, Warsaw, Poland).
Katalin Muszbek (Hungarian Hospice Foundation, Budapest, Hungary), Eszter Biro. (Loránd Eötvös University, Budapest, Hungary).
Adriana Melnic (Romanian Cancer Society), Ioana Gădălean, Florina Pop (Oncology Institute Prof. Iona Chiриcuță, Cluj Napoca, Romania).
Carmen Angheluta, Teodora Ciolompa, Georgeta Popovici, Carmen Sasu (National School of Public Health, Management and Professional Development, Bucharest, Romania).
Ady Lupascu, Cornelia Iacob, Lumița Lupascu (Partners in Progress, Constanța, Romania), Laura Mazilu (Constanța County Hospital, Constanța, Romania).
Pam Malloy (American Association of Colleges of Nursing), Rose Virani, Betty Ferrell (City of Hope, Duarte, California, U.S.A.).

Nicoleta Mitrea, Camelia Anuța (Hospice Casa Speranței, Brașov, Romania), Daniela Mosoiu (Transilvania University, Brașov, Romania).
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b) Data verification and proofreading: Christine Newman (Bristol-Myers Squibb).

Appendix A. Bridging Cancer Care Grant recipients

2013 Grant Recipients
International Society of Nurses in Cancer Care (ISNCC), Eastern Europe Nurses’ Center of Excellence for Tobacco Control.
Project HOPE Poland, Sustainability grant for Improving Early Detection and Diagnoses of Childhood Cancer in Five Regions of Poland.
Russian Nurses Association, Evidence-Based Oncology Nursing: Helping Patients & Family Caregivers Heal.
University of Washington, Evidence-Based Oncology Nursing: Helping Patients & Family Caregivers Heal.
World Services of La Crosse, Inc., Cancer Care Nursing Practice Center of Excellence.

2012 Grant Recipients
Hospice Casa Speranței, Nursing excellence for underserved population in Romania.
Hospices of Hope, Key specialist nurses for children and young adults with cancer (Dragos Nurses).
International Society of Nurses in Cancer Care (ISNCC), Eastern Europe Helping Smokers Quit (EE-HSQ).
Russian Nurses Association, Collaborative Education to Increase Nursing Capacity to improve the Safety and Quality of Care for Patients with Cancer in Multiple Care Settings across Russia.

2011 Grant Recipients
Hungarian Hospice Foundation, Addressing Cancer Disparities in Central and Eastern Europe: Focus on Nursing in the Community: Training, Capacity Building and Community Partnership to Reach Populations Disproportionately Affected by Cancer.
National School of Public Health, Management and Professional Development, Introducing the role of Oncology Clinical Nurse Navigator in oncology nursing care in Romania.
Project Hope Poland, Improving Early Detection and Diagnoses of Childhood Cancer in Five Regions of Poland.
Romanian Cancer Society, Cancer Care Capacity Building for Nurses.
World Services of La Crosse, Inc., Nurses in the general practice setting: A model to improve cancer detection in Russia’s Saratov Oblast.

2010 Grant Recipients
Beckman Research Institute of the City of Hope, Implementation of the End-of-Life Nursing Education Consortium (ELNEC) in the Czech Republic, Hungary, Romania and Russia.
International Society of Nurses in Cancer Care (ISNCC), Tobacco Cessation Leadership Workshops in the Czech Republic.
National Center of Nursing and Other Health Professions, Cancer prevention in community care.
Partners in Progress, LEARN, SHARE, LIVE BETTER! Nurses, Librarians and Patients together in dealing with cancer.
Polish Amazons Social Movement, Nurses for Cancer Patients.
World Services of La Crosse, Inc., Enhancing Nursing Practice and Supportive Care of Patients with Breast and Intestinal Cancer.

2009 Grant Recipients
Hospice Casa Speranței, Integrating palliative care in the community and hospital settings. Hungarian Cancer League and Vásárhely Health Program, Using psychosocial support to increase mammography screening for socially disadvantaged women in Hungary.

Institute of Biostatistics and Analyses at Masaryk University and the Czech Society for Oncology, A nationwide information system to assess cancer care quality and availability in the Czech Republic. Project Hope Poland, Multidisciplinary case management teams for the care and treatment of pediatric cancer in the Czech Republic, Hungary, Poland and Romania.

“Quality of Life” Foundation, Program for workplace breast exams and breast cancer disease training for risk-group women.

2008 Grant Recipients
Amelie Civic Association, Promotion of psych-social help for oncology patients and their relatives, Diagnoza CML, Empowering CML patient communities in the Czech Republic.

Firebird Foundation, Psychosocial interventions for people in poor financial and existential conditions.

GAUJA Against Cancer: Community-based and outpatient psychosocial aid and support for oncology patients and their families.

Hungarian Hospice Foundation, Changing the civil opinion about screening and early diagnosis of cancer, and developing a better psychosocial support system for cancer patients: A national and international training center at the Hungarian Hospice Foundation.

International Psycho-Oncology Society, 2009 IPOS Conference activities focused on capacity building for psycho-oncology in the Czech Republic, Hungary, Poland and Romania.

Urszula Jaworska Foundation, Building psychosocial support programs in Poland.

References
Academy of Oncology Nurse Navigators. Available at: www.aonnonline.org (accessed 12.04.14.).


International Psycho-Oncology Society, 2009 IPOS Conference activities focused on capacity building for psycho-oncology in the Czech Republic, Hungary, Poland and Romania.

Urszula Jaworska Foundation, Building psychosocial support programs in Poland.


