

Michigan Genetics Education Needs Assessment for Nursing

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Introduction

National and state genomics initiatives aim to increase public awareness of the role genetics plays in health and disease. In order to accomplish this endeavor, efforts have focused on evaluating and improving genomics competencies of the public health workforce. Both the American Nurses Association (ANA) and the International Society of Nurses in Genetics (ISONG) promote genetic knowledge as crucial for all practicing nurses.

As an initial step in evaluating the educational needs of nurses in Michigan, the **Michigan Cancer Genetics Alliance** (MCGA) developed a genetics education needs assessment survey for oncology nurses. The MCGA is a collaborative network of individuals working in healthcare that share an interest in cancer genetics. The MCGA provides leadership, education and advocacy in issues relating to cancer genetics, and facilitates translation of cancer genetics research into practice.



The development of the genetics education needs assessment survey met a specific goal of the MCGA to: *assist with the integration of cancer genetics goals in the State Genetics and Cancer Control Plans*. This process also addressed one of the goals of the Michigan State Genetics Plan: *increase genetic literacy within the state, by expanding provider knowledge*.

Methods

In 2004, the MCGA administered a two-page genetics education needs assessment survey to oncology nurses attending the Great Lakes Cancer Nursing Conference. The survey was included in the packet of conference materials distributed to each conference attendee. This needs assessment intended to identify nurses' current levels of education, awareness, and confidence related to cancer genetics. All surveys were kept confidential. Participants could voluntarily provide their contact information for the purpose of being added to the MCGA mailing list and receiving further information about the MCGA. An incentive for participating in the survey was provided by entering respondents in a drawing for a gift certificate.

Results

A total of **136** out of **240 conference attendees** completed the cancer genetics education needs assessment survey, for a response rate of 57%.

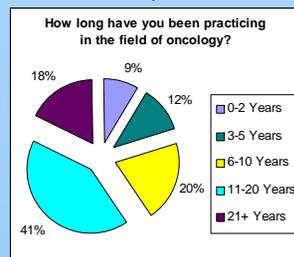
The largest majority of nurses who completed the survey had practiced nursing 21 or more years (53%), and most of the nurses had practiced oncology for 11 to 20 years (41%). *See Graphs 1 and 2.*

In addition, most of the nurses (74%) reported their current employment to be in clinical oncology.

Graph 1



Graph 2



To learn more about the MCGA, please contact:
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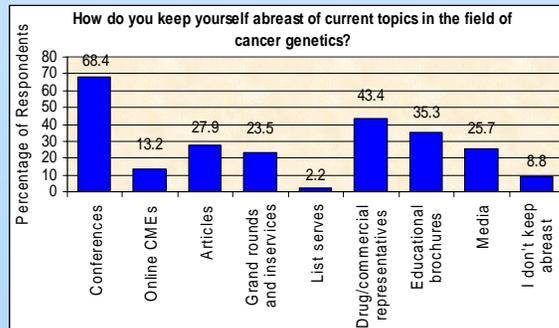
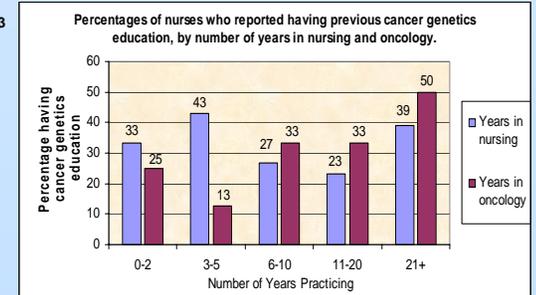
Results

Approximately **67%** of the survey respondents reported **never having any previous cancer genetics education**.

The proportion of nurses who *did* report having previous cancer genetics education differed by number of years practicing nursing and number of years practicing oncology. Nurses who had been practicing oncology for 21 or more years had the highest percentage of those reporting previous cancer genetics education. *See Graph 3.*

Additionally, among the nurses who had received previous cancer genetics education, 73% had obtained this education by attending a professional conference session, while only 4% had taken a formal college course.

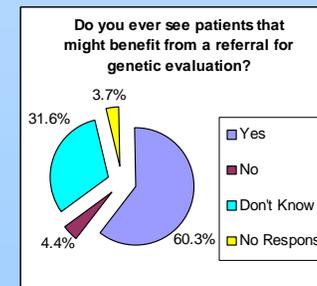
Graph 3



Graph 4

Professional conferences were found to be the most popular method of keeping abreast of current cancer genetic topics (reported by 68% of respondents), followed by receiving information from drug and commercial representatives (reported by 43% of respondents). *See Graph 4.* Professional conferences were also the most preferred forum of education (reported by 71% of respondents).

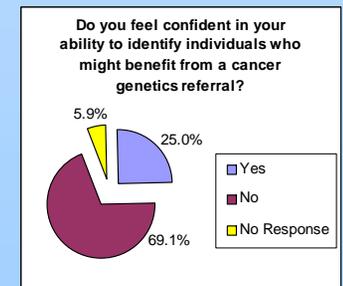
Graph 5



Survey respondents were asked whether they ever see patients who might benefit from a cancer genetics referral, and how confident they are in identifying these patients. *See Graphs 5 and 6.*

Although 60% of respondents reported seeing patients who may benefit from genetics referral, only 25% felt confident in their ability to identify these patients.

Graph 6



Discussion

This survey demonstrated a lack of and need for cancer genetics education for oncology nurses. Among the survey respondents, only about 1/3 had ever received cancer genetics education. All groups, regardless of number of years practicing nursing and/or oncology, had 50% or less individuals with previous cancer genetics education. And within their practice, almost 70% of the nurses did not feel confident in their ability to identify patients that might benefit from a genetics referral.

Professional conferences were listed as the most popular and preferred source of cancer genetics information, although these results may have been biased by distributing the survey to conference attendees. However, a large majority (86%) of survey participants indicated a willingness to participate in cancer genetics education, and the information obtained from this survey supports efforts to develop such education in the future. In addition, the promotion of cancer genetics education for nurses is consistent with the American Nurses Association standards of practice that state all registered nurses have a role in the delivery of genetics services and the management of genetic information.