CancerEd: Tools for Teaching About Cancer  
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According to the American Cancer Society, more than 1 in 3 people will be diagnosed with cancer in their lifetime. Therefore, many children will be impacted by cancer, either by their own diagnosis or that of a friend or relative. Our program, CancerEd, is working to develop freely-accessible educational materials that teach K-12 students about cancer in a scientifically accurate, engaging, and sensitive manner. Our goal is to create a library of age-appropriate teaching materials that promote understanding of cancer and cancer treatments, encourage honest discussions about cancer, and help students identify ways that they can support those with cancer.

This summer, we have created new lesson plans and revised previously developed and piloted educational materials. Because cancer is a complex topic, we frequently use analogies to explain cancer concepts. For example, we developed a lesson that uses a chocolate chip cookie recipe to explain DNA mutations. Through a demonstration involving an incorrectly copied recipe—instead of adding eggs or chocolate chips to the cookies, we add ketchup and pickles—children learn that cells with incorrect “recipes” may not look or act correctly. Our current lesson plans include: Brain Cancer, Cells and Cell Division, Leukemia, Lung Cancer, Metastasis, Prevention, Supporting Those With Cancer, Treatment Options, What Causes Cancer?, and What is Cancer? As lesson plans are developed, they are posted on our website: www.CancerEd.org.

In addition to developing lesson plans, we worked with Professor Alford from Sociology and Social Work to develop and launch two surveys, one for teachers and one for parents. The goal of the teacher survey was to gain a better understanding of the resources teachers need to educate kids about cancer and to gauge their interest in using these resources. We sent the survey to principals in Kent County, MI (all grade levels) and another randomly selected 100 school districts. We received 124 responses. An interesting finding is that most teachers thought that fewer than 5% of their students had someone within their extended family that was affected by cancer. Using data reported by the American Cancer Society and National Cancer Institute, we determined that 20% is a more accurate value. We are planning to write a short paper to report our findings.

The goal of the parent survey is to learn how parents that are personally affected by cancer communicate with their children about their diagnosis and to identify resources that they need to facilitate these discussions. We are currently collecting survey responses.

Working with Professor Wilstermann on this project has been such a special opportunity. As a pre-medical student with the goal of working in pediatrics, this experience will stay with me forever. To be a great doctor, it is important to be able to communicate complex ideas in a simple way to your patients. This summer has really provided great tools on how to communicate with my future patients, especially kids.