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Original article

Human Subjects Protection: An Event Monitoring Committee for Research Studies of Girls From Breast Cancer Families

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A B S T R A C T

Purpose: Researchers must monitor the safety of research participants, particularly in studies involving children and adolescents. Yet, there is limited guidance for the development and implementation of oversight committees for psychosocial, behavioral intervention, and observational studies.
Methods: We implemented a model for an Event Monitoring Committee (EMC) in three related studies recruiting 6- to 19-year-old girls from families with and without breast cancer.
Results: The EMC model can be valuable for investigators and local institutional review boards when additional oversight is desired. Recommendations are provided and intended to be broadly applicable to a wide range of research activities designed to improve the health of children, adolescents, and families. EMC goals, membership, and procedures for monitoring and assessing risks and benefits should be defined but should also be flexible and tailored to the study design and population. The EMC model also provides an independent comprehensive, study-wide oversight mechanism for multicenter psychosocial, behavioral intervention, and observational studies.

IMPLICATIONS AND CONTRIBUTION

It is imperative for researchers to monitor the safety of research participants, particularly in studies involving children and adolescents. The implementation of an Event Monitoring Committee provides a model for independent oversight in behavioral and observational studies involving

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Conclusions: An EMC provides an alternative oversight approach where additional independent assessment and oversight of study-related risks are desired, particularly in the setting of vulnerable populations, children and adolescents, or where risks nontraditional to the medical field (i.e., social, emotional, or cultural) are possible.

children and adolescents, in which additional human subjects' safeguards are desired.

Monitoring the safety of participants in clinical trials and minimizing associated risks is essential to safeguarding human subjects and to the ethical conduct of clinical research [1]. This is especially true for vulnerable populations including minors. One of the more complex and ambiguous issues in research ethics is classifying and quantifying psychosocial risks of participation in research among minors, especially with regards to participation in psychosocial research including behavioral interventions and observational and descriptive studies. Such research does not typically require the oversight of medical clinical trials but has the potential to significantly impact stress and behavioral outcomes [2–4] among participants. Although the benefits of such research typically are thought to outweigh the risks, youth may be especially vulnerable to potential risks given their limited exposure to research and/or the subject matter of the research, which may be unpleasant (e.g., focus on negative events or emotions), immature coping and cognitive skills, and susceptibility to influence. Thus, approaches to monitor risks in studies with minors with the potential to cause distress or negative behaviors are needed.

The Common Rule provides the legislative framework and specific requirements for review, approval, and oversight of any human subjects research supported, executed, and otherwise regulated by the United States government, with additional stipulations in place for select vulnerable populations, including studies involving children and adolescents [5]. The principal investigator (PI) of a study is responsible for monitoring research risks. Additionally, the National Institutes of Health (NIH) requires a Data and Safety Monitoring Board (DSMB) for all multisite clinical intervention trials [6]. The NIH also suggests that independent oversight may be indicated for phase I or II trials, psychosocial, behavioral intervention, and observational studies, particularly if vulnerable subjects, for example, minors, are included or there are other significant risks to study participants [2–4,6–8]. Yet, there is limited guidance for the development and implementation of monitoring plans and oversight committees for psychosocial research [3,4,8]. Several research groups have reported that the traditional DSMB model is inadequate or impractical in psychosocial, behavioral intervention, and observational studies [2–4,9]. For example, in the Resources for Enhancing Alzheimer's Care Health II study, Czaja et al. [4] were required to use a DSMB by their sponsoring agencies and reported several challenges in applying a traditional DSMB approach and guidelines to their social and/or behavioral intervention. These included defining adverse events, assigning attributes and defining resolutions, evaluating interim data, and addressing baseline events and those detected in the course of the study but not related to study interventions [4].

A potential model for independent oversight in clinical studies that are not required by NIH to use a traditional DSMB is an EMC [10]. Erwin and Hersch, investigators of two large, prospective, observational studies of Huntington disease, the Huntington's Study Group (HSG), reported the development of, and experience with an EMC, providing a framework for other research teams [10]. The HSG noted that their EMC model could be valuable in observational studies involving genetically at-risk or vulnerable populations, for whom potential risks might not be physical, but rather emotional, social, or economic, or where unanticipated risks might develop [10]. To our knowledge, the EMC approach to independent oversight in psychosocial, behavioral intervention, and observational studies has not been described in children and adolescents.

We used the HSG EMC model and recommendations provided by Czaja et al. [4] to develop EMCs to monitor potential risks to participants in three observational studies recruiting girls aged 6–19 years from families with and without a history of breast cancer. In this article, we describe the process of creating and implementing an EMC and provide recommendations for investigators seeking an alternative model for independent oversight of psychosocial, behavioral intervention, and observational studies, particularly those involving children and adolescents and those where a traditional DSMB is not easily adapted [4].

Methods

Overview of the Studies of Female Teens and the Lessons in Epidemiology and Genetics of Adult Cancer from Youth Girls Study

Aside from skin cancer, breast cancer is the most common cancer among women in the United States [11]. Although genetic testing and screening for breast cancer are not recommended for children and adolescents, early-life events (e.g., exposures, biologic changes) might modify risks for breast cancer in adulthood [12–15] and many health and risk behaviors begin in or become established during adolescence [16–20]. Most of the offspring in high-risk families learn of familial and genetic risks for breast cancer during childhood and adolescence [21–24]. Little is known, however, about adolescent girls' knowledge, attitudes, and beliefs about breast cancer risks. For example, we do not know how adolescent girls think about preventive health and risk behaviors or how their thoughts and behaviors change throughout psychological and physical development. To address this critical knowledge gap, we conducted the "Studies of Female Teens" (SOFT I and SOFT II) and included a psychosocial and/or behavioral component in the "Lessons in Epidemiology and Genetics of Adult Cancer from Youth" (LEGACY) Girls Study to evaluate knowledge and perceptions of breast cancer risk and health behaviors in girls aged 6–19 years from families with and without breast cancer. The objectives and methods of these studies are summarized in Table 1.

Rationale for an Event Monitoring Committee for the Study of Female Teens and the Lessons in Epidemiology and Genetics of Adult Cancer from Youth Girls Study

Several features and contextual aspects motivated us to incorporate an EMC for the SOFT and LEGACY Girls Studies. First,