

# Karen Muskavitch's Commentary on "An Impoverished Student"

Commentary On  
An Impoverished Student

[Identification and Minimization of Risk](#)

[Payment of Cash Incentives](#)

[Funding of Graduate Students](#)

This case raises three primary issues: the funding of graduate students, the payment of cash incentives to those who volunteer to be the human subjects of research, and the identification and minimization of risk to human subjects. In a discussion of this case, one might choose to cover all or only one or two of these issues. I will consider each of these issues in the reverse order.

## Identification and Minimization of Risk

Researchers are responsible for identifying and minimizing risk because of beneficence, the second ethical principle identified in the Belmont Report<sup>(1)</sup>. "In this document, beneficence is understood . . . as an obligation. Two general rules have been formulated as complementary expressions of beneficent actions in this sense: (1) do not harm and (2) maximize possible benefits and minimize possible harms." Putting this principle into practice, the Common Rule<sup>(2)</sup> that regulates government-funded research involving human subjects states that one of the criteria for IRB approval of the research is that "[r]isks to subjects are minimized: (i) by using procedures which are consistent with sound research design . . . and (ii) whenever appropriate, by using procedures already being performed on the subjects for diagnostic or treatment purposes." It also states that a potential subjects should receive "a description of any reasonably foreseeable risks or discomforts to the subject" as well as "for research involving more than minimal risk, an explanation as to whether any compensation and an explanation as to whether any medical treatments are available if injury occurs . . . ." The FDA rules<sup>(3)</sup> that govern clinical trials of drugs and medical devices have the same requirements.

In this case, then, both the integrity of the research and concern about the subjects require that the research team and the IRB think creatively about possible risks. Frequently, only the potential risks that could come directly from the research protocol are considered. However, other factors in the lives of the subjects could combine with the research to produce more indirect adverse effects. Thus, even a question about the potential subjects' use of prescription drugs might not be sufficient to protect the subjects. In a case like this one, both the taking of nonprescription remedies and the illegal use of controlled substances as well as participation in other clinical trials might need to be determined before the potential risks could be truly evaluated and a person admitted to the study. The regulations make clear that the researcher is responsible for securing this information. It is not the obligation of the potential subject to guess and then volunteer any information that might be relevant.

## **Payment of Cash Incentives**

It has long been common practice to pay people for their participation in research. Some say payment is to compensate them for their time and trouble. Others assert that payment increases subject compliance with the research protocol. Many researchers see compensation as a way to increase their recruitment of potential subjects. As Dickert and Grady note<sup>(4)</sup>, "this practice is one of the most controversial methods of recruitment. Despite discussions over many years, ethical issues about payment remain unresolved."

Concerns about compensation arise out of two of the ethical principles of the Belmont Report<sup>(1)</sup>, the principles of respect for persons, and justice. Respect for persons leads to the need for informed consent. But as the Belmont Report asserts, "[a]n agreement to participate in research constitutes a valid consent only if voluntarily given. This element of informed consent requires conditions free of coercion and undue influence." Is the payment for participation in a research study an "undue influence," that is "an excessive, unwarranted, inappropriate or improper reward"?<sup>(1)</sup> How large does the payment have to be before it is "excessive"? That is one concern.

The other concern is that even at levels that would not be deemed "excessive" for the general population, do financial incentives induce more people of limited economic means to volunteer to be research subjects than the population at large? If so, this disparity is a problem related to the ethical principle of justice. This

principle asserts that it is wrong if one group of people bears most of the burden and/or risk for scientific research while another group receives most of the benefit.

Because of concern for respect for persons and justice, the FDA regulations(3) and the Common Rule(2) state that "[w]hen some or all of the subjects, such as children, prisoners, pregnant women, handicapped, or mentally disabled persons, or economically or educationally disadvantaged persons, are likely to be vulnerable to coercion or undue influence additional safeguards [should be] included in the study to protect the rights and welfare of these subjects."

From the information given in this case, it appears that Gary volunteers for the clinical trials only because he is in need of money, not because he is interested in supporting the research. The case also suggests that the \$3000 offered by the second trial was so large that Gary was willing to risk joining the second trial at the same time that he was participating in the first. Would he have done that if the amount offered had been smaller? We don't know, and this is the sort of question that researchers and IRB members face frequently. What is the purpose of paying research subjects? How much is too much? And is any payment of subjects ethically justifiable? These are important questions to discuss, and the Dickert and Grady article(4) as well as subsequent letters and articles in the literature are good resources.

## **Funding of Graduate Students**

If graduate students are discussing this case, it will be difficult not to spend at least some time exploring this aspect of the case. The funding of graduate students' education is essential to their academic success -- in fact to their very survival -- but it has not been as frequently or thoroughly discussed as it should be. Discussions between professors and students have often been limited to purely academic topics.

This situation is changing, slowly, but now funding is a legitimate topic of discussion. Here are some examples. The Committee on Science, Engineering and Public Policy of the National Academy of Sciences, the National Academy of Engineering and the Institute of Medicine lists funding as one of the three logistical issues that faculty should discuss with predoctoral and postdoctoral candidates(5) . Particularly with regard to the sciences, Macrina observes that "[o]ne of the unique aspects of predoctoral mentoring is the degree to which the trainee is dependent upon the mentor. In many cases, this dependence is grounded in finances. . . ." (6) . For all

disciplines at the University of Illinois, Urbana-Champaign, the Graduate College recommends that departments clearly communicate to graduate students the conditions for their financial support, if any, as part of its Best Management Practices for Graduate Program Improvement(7) . While few would assert that the university has an obligation to financially support all graduate students throughout their studies, most would agree that there is an obligation to clearly describe the support the university is willing to provide and candidly discuss all possible funding options with students. It is possible that Gary was not aware of other options open to him before he volunteered for the two clinical trials.

- (1) [a](#) [b](#) [c](#) The National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research, The Belmont Report: Ethical Principles and Guidelines for the Protection of Human Subjects of Research, 1979. <http://ohrp.osophs.dhhs.gov/humansubjects/guidance/belmont.htm>.
- (2) [a](#) [b](#) 45 CFR 46, <http://ohrp.osophs.dhhs.gov/humansubjects/guidance/45cfr46.htm>.
- (3) [a](#) [b](#) 21 CFR 50 and 21 CFR 56, <http://www.fda.gov/oc/gcp/preambles/53fr45678C.html>.
- (4) [a](#) [b](#) Dickert, Neal, and Christine Grady. "What's the Price of a Research Subject? Approaches to Payment for Research Participation," *New England Journal of Medicine* 341(3, 1999): 198-202.
- (5) Committee on Science, Engineering and Public Policy of the National Academy of Sciences, the National Academy of Engineering, and the Institute of Medicine. *Adviser, Teacher, Role Model, Friend: On Being a Mentor to Students in Science and Engineering*. Washington, D.C.: National Academy Press, 1997, pp. 30-32. <http://www.nap.edu/readingroom/books/mentor>.
- (6) Macrina, Francis L. *Scientific Integrity: An Introductory Text with Cases*. Washington, D.C., ASM Press, 1995, p. 17.
- (7) Graduate College, University of Illinois, Urbana-Champaign, "Best Management Practices for Graduate Program Improvement," <http://www.grad.uiuc.edu/Pubs/bmp/index.html>.