IMPORTANCE OF ETHICS IN INTERNATIONAL RESEARCH PROGRAMS

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It has been noted that most of the top US research universities pursue extensive international research programs. The common goals for these research programs are access to unique sites and populations, promotion of economic development, improvement of research areas of weakness, recruitment of students and faculty, increase in research productivity, increase of the capacity of civil society, and engendering goodwill[1]. The focus on ethics in international research programs has been motivated by:

> (i) the numerous ethical challenges in international research during sudden epidemics[2],

> (ii) the advancement of world-class research as inherently international[3,4], and

> (iii) the need for continued emphasis on ethics education to mitigate the scandals in the global industry such as by Volkswagen[5].

To address ethical challenges that often arise during international collaborations, international frameworks for ethics need to be constructed. These frameworks are often divergent from the classical western ethical frameworks. The international frameworks for ethics are often informed by cross-cultural perspectives[6], the difference in value systems (e.g., about ownership of ideas), gender perspectives[7], lack of institutions, and lack of trained human resources[2]. These international frameworks have recently been used to develop ethics curricula for university students. Recently, an interdisciplinary team[6] (with backgrounds in engineering, social science, linguistics, and art) located in diverse countries (including the US, India, and China) developed a new curricular model that emphasizes ethics and its cultural contexts. The proposed model had the following learning outcomes:

> (i) understanding of ethics & ethical decision-making as a process,

> (ii) complex relationships between researchers and the communities being studied,

> (iii) scholarly integrity within an international context,

(iv) imagining alternative and conflicting ethical positions, and

(v) the larger societal context for ethical decisions.

It was argued that on completion of this curriculum, the students acquired the skills necessary to effectively conduct international research collaborations. A different approach to ethics education that has also been proposed is modeling ethics after the design process. Here the ethics model is such that:

(i) there is no singularly correct solution or response,

(ii) some solutions are wrong answers,

(iii) none of the solutions are clearly superior to the others[8],

(vi) the decisions often involve weighing subjective values[9], and

(v) ambiguities and uncertainties[10] are appreciated.

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