A fundamental ethical problem in statistics arises in experimentation (i.e., in the context of studies of experimental

drugs for treating AIDS). On one side, organizations such as the National Institute of Health insist on randomly

assigning treatments such as flipping a coin for each patient to decide which treatment to assign.

The advantage of randomized experiments is that they allow reliable conclusions without the need to worry about

lurking variables. However, some groups of AIDS patients have opposed randomization, instead of making the

argument that each patient should be assigned the best available treatment (or to be more precise, whatever

treatment is currently believed to be the best). The ethical dilemma is to balance the benefits to the patients in the

study (who would like the opportunity to choose among available treatments) with future patients (who would be

served by learning as soon as possible about the effectiveness of the competing treatments).

The issue is complicated. On one hand, the randomized study is most trustworthy if all the patients in the study

participants. If they are not treated respectfully, the patients might go outside the study and try other drugs, which

could bias the estimates of treatment effects. On the other hand, the patients might benefit from being in an

experimental study. Even if the treatment is randomized, the patients are getting close medical attention from the

researchers. The current best practice is to design studies so that all subjects will be expected to benefit in some

way, but still keeping the randomized element. For example, a study can compare two potentially beneficial

experimental treatments, rather than comparing a treatment to an inert “control.” However, there will always be

conflicts of interest between the patients in the study, the scientists conducting it, and the public at large.

In your original post, compare and contrast at least two research designs that might be used to research lifethreatening diseases/disorders. At least one design should present ethical issues and at least one design should

minimize potential ethical issues. Provide at least one Scripture passage that supports your ethical perspectives on

medical/public health research