"What Went Well?" "What Could Have Been Done Better?"

Marvin L. Birnbaum, MD, PhD

Creative thinking may simply mean the realization that there is no particular virtue in doing things the way we have always done them.

Rudolph Flesch

We aren't forced to follow old ideas.

J. Georg Bednorz

In the discussions published in the Phuket Papers relative to the health responses following the earthquake and tsunami of 26 December 2004, two important issues were raised.¹ The first issue was, "Why have we not learned from what we have learned?" The second issues discussed in each of the Phuket papers addressed: "What went well?"; and "What could have been done better?" These issues stimulated much discussion and highlighted the needs for the evaluation and reporting of the impact(s) of the events and of the interventions provided prior to (preparedness and risk reduction) and following the events (relief and recovery responses). During my presentation at a national conference, I expressed concern about the processes used for planning, implementing, and evaluating interventions directed toward enhancing preparedness. During his summary of the proceedings of the conference, a noted colleague expounded that we only need to know the outcomes of interventions, and that the processes involved in the intervention were not important. It is this assertion, and the underlying attitude, that epitomize our failure to learn from what we have learned.

To learn means to gain knowledge or skill by study, experience, or being taught; to acquire or develop a particular ability.² A substantial part of the reasons we have not learned from what we have learned is that we have not understood what we have learned. Traditionally, we have focused almost exclusively on the outcome of the intervention being evaluated-in other words, whether the intervention met the objectives for which it was designed. For the most part, we have neglected the impact(s) the intervention had on the affected person (medical care) or population (public health).³ If the outcome or the other effects of the intervention are less than expected or have had a negative effect/impact on those affected-what then? Do we abandon the intervention or do we try to modify the intervention? Or, do we try to find out what went wrong and what can be done to make the intervention better the next time it is needed. In order to make it better the next time, the process involved in the intervention must be dissected and examined to identify the critical points of failure. Only then can action(s) be taken to correct those *critical* points of failure in the process.

Evaluations of the processes involved in an intervention are similar to the way in which diagnoses and treatments are defined in clinical medicine. Diagnoses and interventions cannot be accomplished without knowing the physiology/pathophysiology of the organ system(s) involved. Therapy is directed at the pathophysiology.

As noted in the most recent Editor's Corner, for disaster evaluation purposes, the Logic Model has particular relevance.³ In this model, the current existing status of an individual or a population-at-risk or affected by an event is transformed by a process, into a new, hopefully improved, status. This transformation of a baseline state is accomplished through a process that includes the intervention(s)/response(s).

If an intervention meets the objective(s) for which it was intended, but the process used to reach the objective consumed an extra-ordinary amount of resources, should it be used again in the same way in another similar situation, or should the process be examined for *critical points of inefficiency* that can be corrected before the intervention is used again. Such an evaluation of the intervention may lead to changes that will make the process more efficient the next time it is employed—the next time the intervention is implemented, it could consume less resources than when it last was implemented. It only is through such analyses that we are able to really learn from what we have learned.

If an intervention met the objectives for which it was intended, but also produced effects/impacts that were negative and outweighed the benefits derived from the intervention, should the intervention be repeated in another situation? Should the process be abandoned? Should it be modified in an effort to attenuate the negative effects/impacts? By identifying where in the process the negative effects/impacts were generated, we can modify the process to eliminate those points in the process that generated the resultant negative effects. Thus, we could achieve the benefits without the negative effects, and we truly would have learned from what we have learned.

Similarly, when the outcomes are positive and the costs are reasonable, it is valuable to know why the process worked well, to identify the critical points of success, and hopefully, repeat the intervention the next time to benefit the persons/populations affected. When such successes are documented, the process employed should be codified and widely distributed in order that others can apply the same intervention and avoid future pitfalls.

Thus, in the conduct of evaluations, it is essential that a dissection of the process used for the intervention(s) be studied. Simply defining the outcome and labeling the project as a "success" contribute little to our learning, and hence, we cannot incorporate what we have learned into future projects.

An important consideration in conducting evaluations that examine the processes used in an intervention is the fear by some organizations that are responsible for the interventions that negative findings will impair their ability to attract donor support. Donors must recognize that no intervention is perfect and that there always is some room for improvement. It is unlikely that donors will constrain their interest in support of projects that are not perfect. Most donors will appreciate the findings of carefully implemented and unbiased evaluations, and hopefully, they will invest in helping us utilize what we have learned. Their intent is to provide assistance to those in need and the better and more efficient the projects that they fund, the better will be the return for their investments. Efforts to improve those interventions that have not been shown to benefit those affected should be supported by the donor community.

It only is through comprehensive evaluations that we will be able to identify best practices and standards of care-i.e., our science. It is essential that we endeavor to really learn from the evaluations of what we provide-continuing along the current course is wasteful and much that could be learned is lost—and, we repeat the same interventions in the same way over and over. This self-perpetuation of responses without evaluations must end and the donors must assure that evaluations are integral to any project they fund.

A corollary to this need is that evaluators must be trained to conduct such evaluations in a balanced and unbiased manner. The competencies of members of evaluation teams must be defined and a given structure that facilitates the development of best-practices and standards must be used to conduct such evaluations. This is a much needed part of our disciplines and also should be supported by the donor community.

It is time that we quit dancing around the evaluation process. Evaluations are a means for quality improvement and are never to be used in a punitive manner. The donors must understand that evaluations are conducted for quality enhancement of what they wish to accomplish with their resources. Methods are available to standardize the structure for such evaluations.⁴ It is essential that the World Association for Disaster and Emergency Medicine (WADEM) provide the methods used for evaluations and assist in the education and training of competent evaluation teams. This is an important area for collaboration (sharing resources) between the WADEM, the World Health Organization and its regional and country offices, other non-governmental, governmental, and inter-governmental organizations, and the donors. We truly must learn from what we have learned.

All progress has resulted from people who took unpopular positions. Adlai Stevenson

The conventional view serves to protect us from the painful job of thinking.

John Kenneth Galbraith

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