

Does ASIST Work?

Proof and Evidence

Short of divine intervention, science is our only hope for finding "best practices" that prevent immediate acts of suicidal behavior and reduce their overall rate.

The essential qualities of science — that distinguishes it from superstition or dogma — are that there must be well formulated research hypotheses and they must be tested using established techniques that minimize subjectivity and other biases. The test results, whether supportive or not, are evidence. Proof requires, at a minimum, a consistent convergence of many sources of evidence. In the physical sciences (e.g., chemistry, physics, etc.) in particular, the word "proof" might only be used when the evidence is virtually irrefutable.

Like everything human, science occurs in a context. Which research questions are asked and which questions receive funding is often influenced by essentially political considerations, even from within science. Being human, scientists may sometimes use such words as "proof" and "evidence" in ways that, knowingly or unknowingly, suit their own or others political purposes.

Even when science isn't unduly influenced by politics, the science of any era operates under the influence of like-minded assumptions about the world (paradigms, as Kuhn, 1970, named them) that are hard to change. For example, the evidence for "lunacy" is no longer acceptable although some still consider research on the timing of suicide deaths and phases of the moon to be important. Similarly, there have been assumptions about the limited number of correct models for doing science that are hard to change. Research-based evidence usually assumes the application of two standard models: basic science or applied science. Many treatment

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A Applied S Suicide I Intervention S skills T training

and other suicide prevention programs follow an applied science model. Developmental science, upon which ASIST evolved, is a third and less known model (Holton, 1993) that is equally important but not yet as acceptable as the other two. This model of science generally addresses public health and social problems, and assumes that best practice findings from this form of science may sooner or later have a bearing on a persistent national or global problem. Debates among advocates of the various models of science can sometimes become very political and reflect little of their fundamental similarities and complementarity in solving social problems.

Science is also influenced by political factors outside science. Ideally, policy decisions should make use of the best evidence available. Evidence, however, can ultimately only provide insight about what is or what could be, not about what ought to be. All decisions about what ought to be must, in part, be determined by policy. Policy advocates often use, and sometimes abuse the language of science, to support their causes.

When it comes to human behavior, proof is primarily a political word. Most evidence in the social sciences does not approach the level of irrefutable proof. We use the word in the illustrative exchanges below to highlight aspects of suicide prevention policy making. Following that, we move to the evidence for LivingWorks' ASIST.

Proof and Policy

- someone: Show me proof that ASIST works!
us: Proof that it works to achieve what?
- someone: Proof that it prevents suicide.
us: Are you sure that is the right question?

someone: It is the one I am asking!

us: So, it *doesn't* matter if you meant just suicide or might have wanted to include other suicidal behaviors? Or, if you meant the immediate prevention of suicide or the longer-term reduction of suicide rates.

absolute proof *doesn't* exist in most sciences, including the social sciences.

Tell me why you are wondering about this in the first place and I will know how we can move *beyond* answering your questions with more questions.

someone: Are you just trying to avoid the real question?

us: Assuming I am, what makes you think it *doesn't* work? [There is more evidence that it *does* work, than that it *doesn't*. Also, there is at least as much evidence for the ASIST intervention as for any other preventive intervention.]

someone a: Suicide prevention is not that important to me. I want to spend money on other important issues!

us: Likely, nothing we offer as scientific proof about our programs is going to change your political priorities. [By the way, attend ASIST and your perspective might change.]

someone: You should know for sure [read, "virtually irrefutable"] because what you propose costs money!

us: Are you saying the prevention of a persistent public health or social problem requires an investment of money?

someone b: We have our own experts who want to develop a more "locally-relevant" program!

us: Maybe you should ask them the same questions you are asking us. [or better still, the ones following]. We believe that a lot of money is wasted reinventing from infancy what already exists in well evolved form. [By the way, there is proof that ASIST is easily adapted to local circumstances. The developmental science behind ASIST required us to involve local expertise in all aspects of the implementation process.]

someone: Of course!

us: Are you sure that waiting for absolute proof *doesn't* cost more? [There is evidence that doing nothing is much more costly. Suicide is the most common cause of death for those 40 and under. Consider the loss of productive years due to suicide.]

someone c: There is only a limited amount to spend on many good causes and I want to spend my suicide prevention dollars wisely.

someone: You just keep answering my questions by asking other questions!

us: I am sorry to be like that but I want you to recognize that the assumptions behind your questions are questionable. They assume there is only one question to be asked. They ask for the kind of absolute answer that all available evidence can't answer. In fact, your standard of

us: We have dedicated our research to this issue for more than 20 years. I think we have some of the answers you want. Read on.

Evidence

There is growing agreement that a melding of mental health and public health, and to some extent, social welfare strategies could be planned and implemented with the goal of reducing the incidence of suicide (Ramsay and Tanney, 1996; Maris, Berman, and Silverman, 2000). These suicide preventing strategies and associated intervention activities can be broadly categorized under the paradigms of Prevention, Treatment and Maintenance (Institute of Medicine, 1994). There are several subdivisions connected to each approach.

LivingWorks programs mostly fall under "selected" and "Indicated" approaches of the Prevention paradigm and the "case identification" part of the Treatment paradigm. We also have some that are "universal" approaches under Prevention and some that address "standards of treatment" under the Treatment paradigm. The target of our programs is primarily directed to caregiver/gatekeeper segments of general and professional communities and is aimed at increasing their levels of comfort, confidence and competence to help a person at risk of self-harm before the event occurs.

suicide have had a previous self-harm experience. A strategy that prevents the immediate risk of self-harm is also expected to contribute to the longer term reduction of risk by reducing the incidence of this "rehearsal" effect.

To be accepted as valid suicide preventing activities, LivingWorks programs must not only demonstrate that they can help to reduce risk in an immediate context but show that, in the longer term, they can reduce the rate of suicidal behavior. There are many scientific steps and associated pieces of evidence that must be accumulated before measured changes in suicidal behavior rates can be attributed to LivingWorks programs. These evidence accumulating steps are the business of evaluation research. To pave the way for good evaluation research to be conducted, LivingWorks has adopted the developmental science methodology of "social Research and Development" (social R&D) by Rothman (1980, 1986) — a methodology in the tradition of developmental science (Holton, 1993). The next section outlines the broad stages and steps of producing a good preventive intervention that can be subjected to both process and outcome evaluation measure-

Prevention			Treatment	
<u>Universal</u>	<u>Selected</u>	<u>Indicated</u>	<u>Case Identification</u>	<u>Standards of Treatment</u>
Suicide Prevention Programs from LivingWorks Education				
<i>SuicideTALK</i>	<i>ASIST Working Together</i>	<i>ASIST Working Together</i>	<i>ASIST</i>	<i>Beyond Crisis</i>

Our intervention training programs are designed to be effective in achieving an immediate reduction of self-harm and suicide. Sustained reduction of immediate risk is, of course, very likely to contribute to the longer term reduction of risk. In addition, research evidence shows that previous self-harm experience increases the likelihood of further self-harm and that almost one-half of those who die by

ments. Following that, we summarize how each of these criteria has been or could be accomplished for Living Works' core program, the Applied Suicide Intervention Skills Training (ASIST) workshop.

The Process of Producing Evidence

A) Valid theory

1) Causal hypothesis

The basic science of suicide. This theory must allow for and include the possibility that intervention activities (LW's ASIST) can divert the self-harm outcome.

2) Program hypothesis

The developmental science of preventing suicide. This theory must have a mechanism that can convert existing knowledge into a prevention product. The process of how the ASIST program is designed to prevent the number of suicidal acts must be elaborated.

3) Program development model

The methodology of developmental science. This process has to have a rigorous way to develop the program so as to maximize the predictability of achieving the program hypothesis of immediate reduction of risk and longer-term reduction of suicide rates.

B) Program Development (Impact)

2) Design Efficacy

ASIST does more good than harm when delivered under optimal conditions. (Problem-identification, design team, pilot testing, formative evaluation).

3) Design Effectiveness

ASIST does more good than harm when delivered under real-world conditions. (Multiple field trials, design corrections).

4) Implementation Trials

The effectiveness of ASIST has the potential of being sustained and broadly delivered to meet local requirements. Issues to be considered include: i) fidelity/ replicability; ii) mechanisms for distribution; iii) cost-effectiveness; iv) quality control devices. (Test marketing confirmation).

5) Delivery Acceptance

The deliverability of ASIST is more broad-based than local. Target audiences and communities participate, value and endorse the activity. (Meets flexibility and standardization tests).

6) Delivery Availability

The availability of ASIST is more long-term and permanent than short-term and temporary. Widespread/ broad-based distribution occurs over time. (Meets sustainability test)

7) Program Diffusion

Evaluations of ASIST point more in the direction of a positive suicide prevention impact on immediate reduction of individual risk and a longer-term impact on a persistent national and global problem than towards a neutral or negative impact. The program is recognized as an essential developmental science contributor to the longer-term goal of reducing the incidence of suicide and harm to those affected by suicidal behaviors. Pervasive diffusion is only a matter of time. Strategic planning and implementation by local, regional and national policy makers is underway. Program improvements are ongoing, aided by the scientific pursuit and application of "best practices" knowledge.

C) Outcomes

- 1) ASIST impacts the number of suicidal acts as predicted by the Program Hypothesis (A2 above)
- 2) Number of completed and nonfatal suicidal acts is minimized in communities where ASIST is available.
- 3) Added value impacts of ASIST are recognized beyond the stated participant learning objectives.

The Evidence for LivingWorks ASIST

A) Rationale for LivingWorks Approach

1) Causal Hypothesis

A deliberate self-harm act, whether ending in death or injury, is an outcome occurrence that often happens following significant struggles that take place within the person or involve conflict with other individuals or systems in their life. Life and death impulses are weighed in the context of high, often

dramatic emotions, with thinking and decision-making impaired in almost half of all suicides due to substance intoxication. This process has many origins and can be minutes or years in development. The domains of genetics and biomedicine, individual growth and development, family and social environment contribute to our understanding of suicide. Suicide is an outcome that is "caused" by combinations of many factors and virtually never due to any single factor. There are so many contributors that it is difficult to establish which of these might be — or might have been — strengthened or interrupted to avert the arrival of any one person on to the pathway of suicide.

Whatever the diverse origins might be, the decision for life or death is often made alone. Being alone, without resources, is known to be significantly correlated with suicidal behavior (Maris, Berman, and Silverman, p. 81). Often, a sense of aloneness is accompanied by (or created by) a real loss of a valued and important resource. The person at risk may also experience or sense the withdrawal of other external, life-sustaining supports. This is evidenced (and explained) by statements of being unworthy of help, feelings that the situation is hopeless, and failing to act on distress by seeking help. The stigma and taboo surrounding suicide are a further barrier to help-seeking. Especially at this time of decision, the impact of a mental disorder to disable or distort coping, reality-testing and effective decision-making can contribute to a suicide outcome.

2) Program hypothesis

We hypothesize that a significant and modifiable contribution to suicidal behavior is the inability of potential helpers to be caregiving resources to persons with thoughts of suicide. We mean by caregiving resources, persons who have the skills to effectively intervene during the period of immediate risk to help reduce that risk. There is a large literature showing the needs of caregivers for improved attitude, knowledge and skill competencies in their suicide helping (Maris, 1973; Boldt, 1976, 1985; Tanney, 1989). We further hypothesize that the stigma and taboo surrounding suicide contribute

not only to persons at risk not seeking help but also to potential caregivers not acquiring the necessary competencies, or not applying the skills they have when they are needed, including the failure to work together effectively with other caregivers (Lang, Ramsay, Tanney and Tierney, 1989; Niemeyer and Pfeffer cited in Maris, Berman and Silverman, 2000, p. 521). There is a growing awareness that communities have largely ignored suicidal behavior, leaving persons at risk isolated, alone and without resources (UN, 1996). In essence, our ASIST strategy focuses primarily on impacting the period of immediate risk by modifying:

- i) the competency characteristics of caregivers, and
- ii) the awareness attitudes and responses of the community members toward suicide and persons at risk.

Apart from some well established basic principles, scientific knowledge can account for very little of the individual variance in suicide behavior. Many aspects of suicidal situations will be unique. This being the case, three additional arguments support our focus on programs to address immediate risk, skill abilities of caregivers and community attitudes toward suicide.

- 1) If universal preventive approaches under the Prevention paradigm are not able to prevent all thoughts of suicide from occurring, there will still be a smaller but significantly large numbers of persons who think about suicide and are likely to require first-aid intervention. Wide-spread availability of first-aid intervention to reduce the immediate risk of harm for this group increases the likelihood that persons at risk will remain alive to benefit from longer-term support and treatment. In other words, there will be first-aid intervention opportunities and, if first-aid help is not available or not effective, there will be far fewer opportunities for longer-term support and treatment.
- 2) Paper and pencil and other formalized means of screening for suicide risk are not very effective. They provide useful supplemental information but

"none provides ... reliable or predictive measures of suicidal potential" (Maris, Berman, and Silverman, 2000, p. 69). Many who are at risk are missed because active suicidality is not continuous but occurs in episodes. Many more who aren't at risk end up as "false-positives" — people who are identified as being at risk who aren't. It is generally agreed that the most effective means of detecting risk in a person someone is concerned about is to directly ask "whether or not they are thinking about killing themselves" (p. 81). Community attitudes that recognize the presence of suicidal struggles as a natural part of the human condition can greatly facilitate this lifesaving process. They make it more likely that a person at risk will tell someone about their thoughts and more likely that a caregiver will ask directly when he/she surmises that thoughts might be present.

- 3) Preestablished approaches that assume a specific or limited cause for suicidal thinking are unlikely to be effective in the majority of persons considering suicide. For example, treating depression and ignoring suicide is dangerous. Suicide for any particular person is, in many respects, idiosyncratic (peculiar to the person).

Individual caregivers who are comfortable, confident and competent (in other words, person who know the basic principles of helping in suicide first-aid situations) are most likely to be able to help find immediate reduction-of-risk solutions to the idiosyncratic aspects of those situations.

3) Program development model

Living Works aims to support suicide-safe communities and to enable comfortable, competent and confident caregivers through a series of interactive learning experiences. These programs build on each other in a comprehensive, coordinated and integrated fashion with target audiences from the general community to skilled inpatient therapists.

LivingWorks assumes that community attitudes will not change unless members of that community are sensitized to the fact that suicide can affect anyone. We also assume that information will not be received unless it is presented in a context that respects

Suicide-SafeCommunities	
<u>Learning</u>	<u>Experiences</u>
Knowledge	sensitization through
	community attitudes mass media personal experience
Interest	awareness through
	<i>SuicideTALK</i> phamplets posters
Intention	competence through
	<i>ASIST WORKING TOGETHER BEYOND CRISIS</i>
Action	working together through
	UN/WHO Guidelines

adult learning processes and encourages attitudinal clarification. We follow the educational principle that practice is required to acquire skills and develop new behaviors. More than ten years of enquiry (1988-1999) show that the attitude, knowledge and skill development components of ASIST change behaviors in the direction of increased competence, confidence and comfort (Tierney, 1988; Turley and Tanney, 1999; Eggert, Karvosky and Pike, 1999; MacDonald, 1999).

Together, an informed community and competent caregivers are a very powerful resource base for persons at risk. Together, they offer alternatives to

being alone and help with immediate safety needs. Together, they are part of a suicide-safe community in which the likelihood of suicidal acts is reduced.

B) Program Development (Impact)

4) Implementation Trials

LivingWorks trains local trainers to reduce the long-term costs of distributing ASIST. Local trainers can provide training as a normal part of their job or as a public relations benefit for their organization. Local trainers do not incur costs for travel expenses. They can "trade-off" training with other local trainers: "Let's do a mix of my caregivers and yours at my place, and then another mix at your place." Such arrangements reduce or eliminate the need for training fees to be subsidized in cash.

LivingWorks is committed to supporting high-quality, regionally-based trainer networks. Every trainer candidate is thoroughly informed of the expectations of a trainer prior to attending the initial, intensive five-day Training for Trainers Course. Both the candidate and his/her employer must testify that they understand and accept these expectations. New Trainers receive comprehensive trainer documentation (easily argued as unrivaled by another standardized suicide prevention training program) that is kept current through a long term working relationship with SIEC—the largest suicide prevention data base in the world. Trainers receive the on-going support of local consulting trainers and/or established trainer networks, trained and supported by LivingWorks. All participant evaluations from each workshop are reviewed and receive comments. Trainers must maintain on-going performance requirements to remain an active registered trainer. LivingWorks provides additional support through email, web, fax, phone and newsletters.

Trainers are committed to following standardized procedures in delivering ASIST — a commitment which they testify to uphold at the end of their Training for Trainers Course when they appreciate what that commitment means. An observer could listen in on any ASIST workshop being presented any where in the world by any team of trainers and

overhear the same things occurring at the standardized times. (Trainers understand that ASIST is tightly scripted yet participants will experience the program as being highly responsive and flexible to their needs — a key characteristic of a successful broadly disseminated program.) ASIST is widely distributed with fidelity.

5) Acceptance

6) Availability

7) Diffusion

ASIST is available in many locations throughout most of Canada, an increasing number of states in the United States, and all of Australia and Norway. The ASIST program is widely accepted in many places as the standard by which other suicide intervention programs are judged (CDC, 1992; Eggert, Randell, Thompson, and Johnson, 1997; Rogers and Holton, 1999). Initial implementation costs are usually the only objection that results in the selection of other programs (Bagshaw, 1988). In places where suicide prevention efforts are given low priority or not highly valued, the implementation of ASIST can help shift these perspectives often after even minimal exposure in a location (Crookal and McLean, 1986). LivingWork's' marketing strategy for ASIST rests almost entirely on "word of mouth." New trainers in a location typically only need to promote their first several workshops. After that, demand often exceeds availability until more trainers can be trained. ASIST "sells" itself.

Over 250,000 caregivers have participated in ASIST. Virtually every one of them has valued the experience. While participant approval is not "proof" that learning ASIST principles will actually help persons at risk, it is extremely doubtful that 250,000 caregiver participants, over an almost twenty year period, would continue coming to a program that isn't helpful. After all, these are the same people who deal with persons at risk. We consider their opinion about ASIST as important evidence. In a developmental scientific model, widespread acceptance is given more importance because the acceptance of users is critical to changing the conditions surrounding the social problem.

C) Outcomes

Programs that are not based upon well formulated theory are not ready for outcome evaluation. Research hypothesis can not be clearly specified and research becomes a kind of "fishing expedition" wherein results are very difficult to interpret. Similar difficulties would result from outcome studies on a program that could not be replicated with fidelity since such a program would have no consistent nature. Outcome studies on programs that can not be easily distributed in a cost-effective manner are of no practical significance.

ASIST is a mature program with causal, program and program development hypotheses fully elaborated. It is an established program that can be widely distributed with fidelity and cost effectiveness. It is a program that is ready for rigorous outcome research.

Suicide and nonfatal suicidal behavior are low base rate phenomenon. In other words, they don't happen in large numbers relative to an entire population within a specified time period. Yearly fluctuations in suicidal behavior rates can be random and unrelated to any specific causes. Several research design factors could help to ensure reasonable proof that any favorable change in suicidal behavior rates could be attributed to ASIST:

- 1) large sample size;
- 2) matched control group; and
- 3) base rate and longer-term outcome measurement sampling.

To help ensure that any positive effect is not limited to the particular community in which it occurred (the interaction effect), it would be desirable to sample other locations with different socioeconomic and cultural mixes. Another design element is that the research team be independent of the ASIST training team. The specific design would be the research team's responsibility. Doubtless, the design would be some combination of scientific rigor and practical political considerations. While it is not possible to say what the design would be at this point, some hints can be provided.

Communities of 250,000 to half a million would be chosen. A minimum critical mass of 6% of that population would be trained in ASIST. Base rate sampling of non-fatal suicidal behavior would be done in both the treatment and control communities. The suicide rate would be known but it might be advantageous to try to rigorously estimate the rate of under-reporting in the study areas. Non-fatal suicidal behavior rates would likely be estimated using methodology developed by Ramsay and Bagley (1985). Those charged with counting suicides would likely need to be trained to use standardized procedures since the existence of trained caregivers in the community is likely to create a climate where suicides are more accurately recorded as suicides. Base rate sampling would also likely include an estimate of existing levels of training in the community. Re-sampling of rates of suicidal behavior every year after the critical mass has been reached up to 5 years or beyond would be desirable but re-sampling at 3 and 5 years are more likely. Sampling intervals would also be affected by the rate at which caregivers could be trained. On going training would be scheduled to maintain or exceed the critical mass minimum. To help control for a possible interaction effect and, at the same time keep costs down, the design might call for the same intervention in only one other community — that community being different in character from the first community.

Evidence and Policy

someone: There is much more to the establishment of proof than I thought.

us: Yes. It has taken the developers a long time to get ASIST to where it is today, and there still much more to do, as you have seen. Most suicide prevention efforts are sporadic, short-lived, often "knee-jerk" reactions to higher-profile suicides. Even when evolved from a more comprehensive suicide prevention plan, the effort is typically grossly underfunded and minimally coordinated. If we can complete the evidence gathering process, the principles of ASIST could become a standard of care for helping persons at immediate risk of suicide and for the longer-term objective of reducing rates of suicide. That status would change policy significantly. Interested in being involved in this proof-evolving and suicide-reducing challenge?

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