

Trials of Improved Practices (TIPs) Giving Participants a Voice in Program Design

Trials of Improved Practices (TIPs) is a formative research technique developed by the Manoff Group. Using TIPs, program planners pretest the actual practices that a program will promote. In essence the procedure consists of a series of visits in which the interviewer and the participant analyze current practices, discuss what could be improved, and together reach an agreement on one or a few solutions to try over a trial period; and then assess the trial experience together at the end of the trial period. The results are moved directly into program design.

TIPs was first used in the late 1970's and early 1980's in nutrition programming. Using the TIPs methodology with families, program planners learned how to improve instructions for preparing homemade oral rehydration solution and ways to modify weaning foods in different regions of Indonesia. Over the past decade, TIPs has been applied to other public health issues including HIV/AIDS, school health, infectious disease control, maternal health and family planning. Using TIPs gives program planners an in-depth understanding of families' preferences and capabilities, as well as the obstacles they face in improving their health and their motivations for trying new behaviors and practices. TIPs focuses on behavior, what people do, rather than knowledge, or what people know or believe. Trials are the best way to gauge the acceptability new practices and learn how to promote and support them.

Some Recent Applications of the TIPs Methodology

Mozambique and Zambia	Injection safety practices	Multiple behaviors with different providers related to prescribing, injecting and waste disposal	2004
Malawi	Schistosomiasis, malaria, HIV/AIDS prevention, and hygiene behavior	Multiple behaviors, including using insecticide-treated cloths for sleeping; abstinence, condoms, income-generation for girls, parents talking to young children about HIV/AIDS prevention; basic hygiene in schools and at home	2002-2003
Dominican Republic, Nicaragua, Peru	Basic hygiene (hand-washing, consuming clean water, safe feces disposal)	Individual and family practices in home and environment, also purchasing subsidized essential hygiene products	2001-2003
Dominican Republic, El Salvador (CHANGE Project)	Dengue	Family actions to avoid mosquito breeding in household water containers	2001-2003
South Africa	Indoor air pollution	Repairing stoves, improving ventilation, shortening burning time, keeping young children away from smoke	2002
Dominican Republic	Young child feeding	Focus on calories and nutrient content in normal times and when children are sick or recovering	2001
Pakistan	Men's role in family planning decision making	Discussing with spouse, learning about methods, making joint decision, starting a modern method	2000
Zambia	Insecticide-treated bed nets	Obtaining and appropriate use of treated bed nets	1997

Every public health program must address behavioral issues if it hopes to reach its desired impact. Any public health program can enhance its chances of effectively motivating and facilitating changes in health-related practices by including the groups who will be most involved in the program in testing and defining the practices to be recommended.

Trials of Improved Practices (TIPS) Methodology

TIPs evolved out of commercial marketing and anthropology research methods. The objective of TIPs is to define feasible and efficacious behaviors and learn whether they are also acceptable and feasible. The actual technique of TIPs combines the advertising-design concept of concept testing (Market Navigation, Inc.) with product testing in order to modify the practice or "product" before it is ever introduced into the market, based on feedback from a small sample whose members actually try using the product in their daily lives.

Through TIPs, planners learn from families, providers or communities:

- what practices the program should promote, eliminate or modify;
- what are the most effective motivations and most significant barriers to new practices;
- what level of change in particular behaviors the program can expect; and in some cases,
- what level of health or nutrition impact the program can expect.

In many cases, trials are the *only* reasonable way, other than learning from program failures, to gauge the acceptability of a practice or product and the best ways of promoting it. Trials are the best way to anticipate and prevent problems in their acceptability and proper use.

Examples of TIPs for Program Planning

PROBLEM: A child feeding program in the Gambia intended to promote groundnut paste to enrich children's porridge because of the universal acceptance of mothers to the idea.

TIPs: The trials demonstrated that mothers could only afford groundnuts one or two times a week and that alternatives were necessary.

PROBLEM: In southeastern Nigeria, none of 28 children aged 6-23 months had an adequate caloric intake in the initial food recall.

TIPs: Almost all mothers in these trials rejected the advice to make weaning food thicker but almost all the mothers accepted the idea of adding a little palm oil, ground nuts or other calorie- and nutrient-dense foods to the weaning food – which had precisely the same nutritional benefit. For the final trials, 21 of the 28 children aged 6-23 months had adequate caloric intake.

Problem: A vitamin A program in Indonesia promoting consumption of dark green leafy vegetables (DGLVs) wanted to convince mothers that DGLVs were digestible by their young children.

TIPs: However, TIPs showed that mothers' concerns about digestibility was only for children 5-12 months old. Overall, the main barrier was that the mothers felt their children did not like DGLVs. The mothers suggested ways to make the DGLVs more appetizing. This new insight affected the recipes and key program messages.

PROBLEM: In India, Pregnant women were not taking iron pills.

TIPs: Trials with pregnant women showed that remembering to take a pill everyday was an unanticipated problem. To be successful, the strategy needed to contemplate ways to remind women.

PROBLEM: Parents in Malawi were talking to their children about sexual responsibility and safety too late, at ages when their children were already practicing unsafe sex.

TIPs: Showed that, with a verbal orientation and a Cool Parents Guide suggesting how and what to discuss, parents and their 8-11 year olds could have excellent, open discussions about these key practices.

What behaviors can be tested?

Most health behaviors can be tested in TIPs. There are some limitations, however. The following types of behaviors are more difficult, or even impossible, to test.

- Behaviors that stretch over long time periods (e.g., get your child fully immunized by age 1, breastfeed your child for at least 2 years)
- Behaviors that are appropriate only at rare or unpredictable times (e.g., appropriate care-seeking for obstetrical emergencies; communities helping with emergency transport during emergencies)
- Behaviors with major external barriers such as poor policies
- Behaviors that require collaboration or approval of many colleagues or supervisors

Behavioral changes that are difficult or not possible to test in TIPs can be explored through other methods such as in-depth interviews or focus group discussions.

Using TIPS

TIPs is normally the second phase of the formative research process. The first phase consists of a literature search, expert interviews and (often) in-depth interviews and observations (with the key participant groups -- usually mothers). Based on the results, the research team designs the TIPs -- designates the types of participants and the sampling plan and develops counseling and motivation guides for the problem practices of interest in health and nutrition.

Field Work

Field work for TIPs usually consists of two or three home interviews. In the first (assessment) visit, the family situation is analyzed through interview questions, observations, and sometimes through a food frequency assessment or dietary recall. Experienced interviewers, who can independently assess the feeding (or other) problems, can move right into negotiating improved behaviors. The alternative is to bring back the interview information and have the research team or technical specialist analyze the findings, assess the problems and suggest best feasible behavioral solutions.

Negotiation

In the negotiation visit, the field worker gives feedback to the mother (or others) on their practices (both on what they are doing well and areas they might improve) and gives several relevant suggestions of actions the mother might try for a trial period. (This period is often 5-7 days but may be as long as a few months.) These suggestions are discussed thoroughly and the mother selects one to three of these ideas for trial. In the final (evaluation) visit, the interviewer learns what the mother did, how and why; how she felt about the trial experience; what was easy and difficult; if she discussed the new behaviors with anyone and what they said; how she would recommend the same practice to a friend, etc. If it was part of the initial visit, a food frequency assessment or dietary recall is repeated.

Analysis

Analysis of TIPs findings is relatively straightforward and generally easier than analyzing in-depth interviews or focus group discussions. The analysis is both quantitative and qualitative. For example, how many mothers had a particular problem, how many accepted the improved behaviors and which behaviors did they select, what were the most effective motivators, what was the mothers' experience and success during the trial, what modifications or suggestions did they make and why, who in the family and community influenced their behavior, what were the main barriers they had to overcome and how did they do this, what were their perceived benefits, and how many intended to continue the new practice.

Feasibility and Acceptability

Before designing TIPs, the research team requires a thorough understanding of the technical basis for acceptable practices. This information is required so that options discussed with families and their suggestions can be evaluated. For example, if insecticide-treated curtains are as effective as bed nets, then both options could be tried by families. In the Dominican Republic, an efficacy study of alternative community practices to reduce mosquito breeding. The best technical alternatives were tested in TIPs for feasibility and acceptability with families along with suggestions from families. If women can increase the caloric intake of their children by making the food less watery, increasing feeding frequency, or increasing portion size, then women should be able to explore these options and find out their preferred combination to improve nutrient intake of their child.

Sample Size

The TIPs sample is generally small, often 20 to 50 families (or health providers), but it is carefully selected. The more diverse the population and extensive the behavioral issues, the larger the sample needs to be. The family informant is usually the mother or other principal caretaker, although fathers, shopkeepers and health workers responsible for introducing new services or products could be participants. In the case of TIPs on hygiene practices, there might be separate segments (and distinct proposed behaviors) for families with and without access to a latrine. For nutrition trials, the sample includes respondents segmented by divisions that are expected to have a significant impact on the practices in question, the child's age, condition (sick, healthy, recovering) or mothers' age and condition (pregnant or breastfeeding), by cultural group or rural or urban residence. TIPs with providers use separate sub-samples of different types of providers.

Reliability of Findings

As is the case with most qualitative methods, results sometimes are met skeptically by physicians because the sample sizes are small and possible bias because mothers receive better counseling. Over the past 20 years however, the findings from behavioral trials have been good predictors of behavior change for programs. While the proportion of respondents that changes practices during trials is likely to be higher than in the actual program, the TIPs results are consistent predictors of achieving changes in specific behaviors.

In addition, practices that respondents either chose not to try or try with limited success can be simplified or eliminated from the program. Often a lack of resources prevents a significant portion of respondents from carrying out recommended practices. This result requires a much broader development approach than simply promoting changes in practices. The behavioral failures in the trials are often as valuable as the successes.

Length of Trials

Most trials last approximately one week, but the length of the trials varies depending on the nature of the behaviors being studied as well as on practical considerations.

- A trial on attending an upcoming National Immunization Day needs to last only one day.
- The trials for using insecticide-treated bed nets lasted several months in Zambia to learn about families willingness to continue to use nets even after the high season for mosquitoes ended. To learn about families' willingness to re-dip their nets, trials would have to last 6 months or more, which is not practical in most circumstances.
- Trials on male participation in family planning in Pakistan lasted four months, with researchers interviewing various family members at several points in time to learn about intra- and extra-family discussions, feelings and practices.

Flexibility

Flexibility is key to successful TIPs. The research plan should be flexible and learn from participants to fine-tune the contextual, motivational, and action components of a recommendation. The goal is always the resolution of the public health problem, but the more that potential program participants can help planners anticipate implementation difficulties, the better.

For example, trials to improve compliance with taking iron tablets have shown that the biggest initial barrier is access to the pills. Once access is solved and pills are available in the community, the problem that emerges is women's fear of side effects. Trials have shown that, with good counseling, the majority of women can overcome the side effects. The key to long-term success is to motivate women to take the pill even after she feels better. Trials offer culture-specific motivations.

Implementing TIPs

The more true-to-life a trial can be, the more it will reveal. To the maximum extent possible, the counseling and other supports to new behaviors in the TIPs should be feasible to provide in the program is planning. Since TIPs rely on one-on-one counseling, planners can learn more if the program itself. If mothers are unwilling or unable to carry out new practices even with good, intense counseling during TIPs, there is little reason to expect better results in the program itself.

Similarly, to learn about proper use or compliance with products in TIPs, such as insecticide-treated bed nets or iron tablets, *obtaining* these items should be included as part of the trials. If the nets or pills are simply handed out, there is a missed opportunity to gain insights about important behaviors. In the Pakistani iron trials, most families chose to have the father purchase iron tablets in the bazaar rather than have the mother obtain them for free at a government health facility. Iron trials in Indonesia showed traditional midwives were acceptable distributors of tablets and that women preferred to visit the TBAs' homes rather than vice versa.

Nutrition TIPs usually last 5 to 7 days and consist of two or three interviews, depending on how experienced the field workers are. Experienced workers can combine an assessment and negotiation visit and then carry out the evaluation visit. Less experienced workers may need to meet with their supervisors between the first two visits for help in identifying feeding problems and appropriate behavioral recommendations. In general, a two-visit design saves some time and expense.

For non-nutrition TIPs, the number of visits and length of the trial may vary greatly. If there is a short break between in-depth interviews done in the first research phase and TIPs, one strategy is to use the in-depth interviews research as the assessment visit for TIPs. In this case, the interviewer returns to the same home to begin TIPs with the negotiation interview.

TIPs on family planning in Pakistan followed the plan described in the table. Each visit consisted of interviews different people in the family on different steps in the process.

Pakistan: Tips for Family Planning

TIPs Interview and Timing	Researchers' Tasks
Visit 1: initiate trial (half by male interviewers with husbands; half by female interviewers with wives)	Interview the husband or wife concerning perceptions and experiences regarding the concept of family planning, various methods, birth spacing, intra-family responsibility, roles and communication concerning these issues. Clarify their objectives re: family planning/birth spacing/family size. If either partner is interested in exploring the possibility of family planning, request agreement to discuss this thoroughly with spouse and to try to reach a common objective and plan for how to do this. Schedule a follow-up interview, mentioning a desire to talk to other family members at that time. If respondent is not interested in even exploring the possibility of using family planning, continue the interview to understand why, but do not count respondent in the TIPs sample.
Visit 2: 5/7 days later	Interview the same respondents on what they did, what happened, and how they feel about it. Did they talk to spouse, mother-in-law, friends? What happened? Also interview spouse and mother-in-law separately. For those couples that agreed to pursue family planning, ask if they will continue the trial. See if they will agree, with the spouse, to study an information pamphlet giving reliable information on methods, their safety, and appropriateness; and then making a decision to use or not use some method; or deciding to delay a decision, or get additional information.
Visit 3: 2 weeks later	Interview the husband and wife separately about what they did, what happened, how they feel about it. Then ask them if they are willing to obtain and begin using a method for the next month, when you will return for a final interview.
Visit 4 1 month later	Interview the husband and wife together about their experience, feelings, side effects, benefits, others' opinions, intentions to continue.

Benefits of TIPS

Without trials, planners must rely on simply looking and listening to determine the nature of their task – promoting behavior change. TIPS adds an additional technique, experimentation by potential users. While this technique may seem unorthodox to some, it is highly productive, is as predictive as any method available, and is easier to use by TIPS implies certain costs in time, staff and other resources. Expense categories may include salaries, per diems, transportation, technical assistance and (if needed) a contract with a research company.

Without trials, planners must rely on simply looking and listening to determine the nature of their task -- behavior change. TIPS adds an additional technique, experimentation by potential users. While use of this technique program personnel, particularly on a continuing basis, than less structured qualitative techniques.

TIPS is not a "magic bullet" that guarantees program success. But it is a very valuable tool for encouraging participation, giving program workers an appreciation of the unique contributions of mothers and other program participants as well as skills in assessment and counseling and enables planners to identify key practices that are not only efficacious but also feasible for people to carry out, given appropriate support.

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