A Population Approach to Parenting Support and Prevention: The Triple P System

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Summary

Adverse parenting practices, including child maltreatment, interfere with children's adjustment and life outcomes. In this article, Ronald Prinz describes the Triple P—Positive Parenting Program, designed to improve parenting population-wide.

Prinz offers four main reasons to take a population approach. First, official records grossly underestimate the extent of problematic parenting. Second, communities need to normalize involvement in parenting support programs rather than singling out or stigmatizing parents. Third, a population approach could have many benefits, such as preventing behavioral and emotional problems in early childhood, encouraging greater school readiness, and reducing the risk of problems during adolescence. Fourth, compared to strategies that target a narrow segment of parents and children, a population approach may create a climate of positive social contagion for positive parenting.

Triple P—a multitiered system of programs with varying intensity levels, delivery formats, and specialized variants—aims to increase the number of parents who have the knowledge, skills, and confidence to raise their children well; to decrease the number of children who develop behavioral and emotional problems; and to reduce the number of children maltreated by their parents. Prinz outlines the origins and guiding principles of Triple P, describes the program model, and explains the conceptual framework for the multitiered approach to prevention. He then summarizes the evidence for this approach, emphasizing population studies that have tested the full Triple P system. He also discusses such critical issues as implementation and quality assurance, benefits versus costs, and significant obstacles to adopting a population strategy for parenting support.

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mproved parenting can play an important role in preventing child maltreatment. By definition, child maltreatment involves parenting gone awry. Many factors can affect parenting. Nonetheless, support for parenting and families has the potential to prevent or reduce child maltreatment. To fulfill this potential, however, likely requires a well-formulated approach aimed at reaching large segments of the community. Before discussing how such an enterprise might be implemented, we must answer a more basic question: why take a population or community-wide approach to parenting support as a key strategy for preventing child maltreatment?

For one thing, official records of child maltreatment grossly underestimate levels of problematic parenting generally, and maltreatment specifically. For example, a random household telephone survey conducted in North Carolina and South Carolina found that parents reported engaging in physically abusive parenting behaviors at a rate more than 40 times higher than the official substantiated rates of physical abuse in those states. Many parents, not just those in the child welfare system, rely heavily on coercive discipline practices for child misbehavior. It's well established that coercive and physically abusive parenting practices damage health and child development, and that they're prevalent and all too commonplace. These facts justify a broader public health response.²

Another reason to take a population approach is that an intervention that singles out parents who are at elevated risk for child maltreatment may stigmatize them and deter them from participating. Parents typically don't seek out programs that explicitly

espouse prevention of child abuse, with the possible exception of either court- or agency-mandated participation. Stigma and deterrence run counter to reaching large segments of the population, which is so critical to prevention. But if parenting support services are presented and perceived as beneficial to the whole community of parents, we can normalize parents' participation in these programs. Consider prenatal birthing classes, for example: they've become the norm because they engage parents whatever economic, racial/ethnic, or family-configuration groups they belong to. Similarly, public schools encourage parents to get involved in their children's education. A key goal for the public health strategy, then, is destigmatized and normalized access to parenting support for prevention.

A broad public health approach to parenting support could also affect many kinds of outcomes. Evidence-based parenting interventions have been shown to be effective not only in preventing child maltreatment, but also in preventing children's early behavioral and emotional problems, and improving readiness for school. They can also reduce the risk of adverse outcomes in late childhood and adolescence, including academic problems, substance abuse, delinquency, dropping out of school, and teen parenthood.3 Pursuing several goals and outcomes at the same time with the same core intervention can produce efficiency. And having multiple benefits can make population-wide parenting interventions more viable than those that focus exclusively on preventing officially documented child maltreatment, which by itself occurs relatively infrequently.

Finally, a population approach can lead to what's known as positive social contagion.

In public health, contagion refers mainly to the spread of disease. The concept of social contagion, however, has been applied to effects on behavior, for better or worse.4 Parenting practices might be susceptible to social contagion, given how often parents, relatives, and neighbors discuss child-rearing and witness each other's family interactions. The challenge is how to activate processes that might increase positive contagion among parents. Compared with focusing only on families at greatest risk, taking a population-wide approach to parenting support could be a better way to induce positive contagion. Reaching many parents, strategically using media and communications, and engaging many service sectors might all spread contagion for positive parenting. We need more research to better understand positive social contagion and how to foster it among parents.

The Triple P System as an Example

The multilevel system of interventions known as the Triple P—Positive Parenting Program was established over many years by Matthew Sanders and his colleagues at the University of Queensland in Australia. Triple P represents a well-detailed population approach to parenting and family support.5 As an innovative population strategy, it combines many forms of prevention. Guidelines from the Institute of Medicine classify preventive interventions in three categories:6

- 1. Universal interventions applied to the general population without regard for risk among individuals
- Selective interventions focused on a subgroup with one or more risk factors that make poor outcomes more likely

Indicated interventions aimed at individuals who are already showing signs of problematic outcomes

Triple P might best be called a blended prevention model.

The Triple P system combines all three of these categories in what might best be called a blended prevention model. Some of the Triple P programs fit well in a universal context for the general population, while others serve specific segments of the population—for example, parents of children with pronounced behavior problems, parents at risk for maltreatment, or parents of children with developmental disabilitieseither with tailored content, more intensive programming, or both. Using a blended prevention model as well as varying program intensities, Triple P attempts to meet the needs of many kinds of parents to achieve greater reach among the population.

Origins of Triple P

The Triple P approach belongs to a broader class of interventions that emerged about 50 years ago. In the 1960s the prevailing paradigm, which was based on psychoanalytic assumptions about mental health disorders, began to be replaced by a new paradigm emphasizing the social environment. The shift happened more quickly in child mental health than in adult mental health, in part because the family environment's impact on children was readily apparent. A key tenet of the environmental approach is that parents are well positioned and can be called on as "architects" to establish or alter the socialenvironmental conditions at home and elsewhere to improve their children's lives.

Thus, behavioral family-based interventions grew out of social learning theory and applied behavior analysis to eventually become the cornerstone of clinical child psychology. This approach to the treatment of children's problems was easily extended to prevention, because both applications seek to empower parents and improve parenting practices.

Triple P belongs to a larger class of evidencebased parenting support (EBPS) that has proven effective in prevention and early intervention.⁷ Triple P is similar to other EBPS interventions with respect to the family process, philosophy, and concepts of effective parenting. EBPS tenets include:

- Child behavior occurs in the context of social interactions that parents can alter.
- The intervention philosophy champions collaborative goal setting and problem solving; practitioners consult with parents rather than lecture or prescribe to them.
- Practitioners adopt a positive frame by assuming a nonjudgmental attitude toward parents, emphasizing parent and child competencies over deficits, promoting positive child behaviors and parenting practices to displace problematic ones, and exuding a professional style reflecting patience, encouragement, and optimism.
- The interventions overall are theoretically driven and focused on action, making use of specific, concrete, and practical parenting strategies.

Triple P subscribes to these common facets, which vary modestly among EBPS interventions. But Triple P is unique in taking a broad public health approach and uses a set of procedures aimed at greater reach and

collective impact. This framework increases the potential of an EBPS intervention to reduce the prevalence of child maltreatment.

Main Principles

Triple P's consistent conceptual framework draws from multiple disciplines and theories, including applied behavior analysis, cognitive-behavioral intervention, parentchild attachment, and family systems theory. For example, Triple P is guided by:

- A social learning model of parent-child interaction that recognizes how parents and children influence each other
- Research on coercive and dysfunctional patterns of family communication⁸
- Developmental research on parenting in everyday contexts⁹
- Public health perspectives on family intervention¹⁰

A key concept of Triple P is self-regulation, the process whereby individuals (a) acquire the skills they need to manage and alter their own behavior and emotions, and (b) become independent problem-solvers in the face of challenges. Self-regulation applies to several aspects of the Triple P system.¹¹ At the level of the child, the strategies often involve parents promoting self-regulation in age-appropriate ways. For example, parents can teach children new skills or behaviors (like brushing teeth or picking up clothes) by giving them small prompts to encourage them to achieve mastery—without the parent completely taking over. Parents can promote children's self-regulation of emotions by sidestepping outbursts and instead watching for opportunities to react positively to frustrating events. For parents, self-regulation comes into play in managing

their own emotions and behaviors when interacting with their children. Triple P also shows parents how to challenge unhelpful attributions, such as "my child is out to get me" or "I'm failing," and replace them with constructive thoughts and actions, such as "What can I do to redirect my child's behavior?" For practitioners, self-regulation involves identifying and changing cognitions that interfere with their interactions with stressed-out parents. Triple P professional training not only provides useful information and resources, it also encourages self-regulation through such activities as follow-up reading, participation in professional peer support groups, and constructive self-evaluation.

Multitiered System

Triple P's chief goal is to alter the prevalence of parenting and child problems by making high-quality EBPS programs

widely available to parents. Specifically, it aims to:

- 1. Increase the number of parents who have the necessary knowledge, skills, and confidence to parent their children well
- 2. Increase the number of children who are thriving socially, emotionally, and academically
- 3. Decrease the number of children who develop serious social, emotional, and behavioral problems,
- 4. Decrease the number of children who are maltreated or at risk of being maltreated by their parents

To achieve these goals, Triple P operates as a multitiered system of programs with varying intensity levels, delivery formats, and specialized options or variants. The

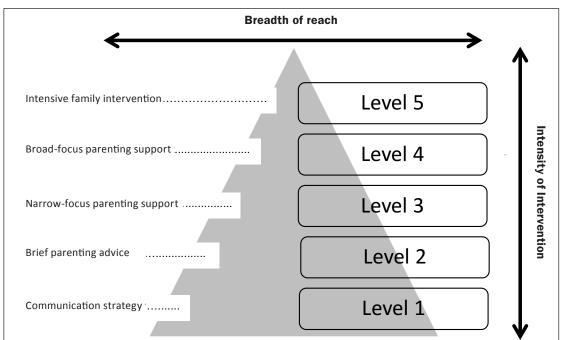


Figure 1. The Multitiered Triple P—Positive Parenting Program System

interventions are organized around five levels of increasing intensity. The lowest level, 1, is a media and communication strategy; levels 2–5 all involve delivering services of some kind. The five levels together form a tiered continuum (represented by the pyramid in figure 1), reflecting a blueprint for population reach. The width of the pyramid at each step indicates the relative proportion of the population addressed at that level of intensity. The pyramid's base is wide to denote universal reach, while the top denotes a focus on a considerably narrower segment of the population for indicated or targeted reach.

Multiple levels of intensity boost capacity and make more efficient use of precious resources.

The multitiered approach addresses the following factors:

Reach. To reduce prevalence, programs must reach a substantial portion of the population. That's easier to do with multiple levels of program intensity. It would be impossible to deliver the highest-intensity program to all families, if only because resources wouldn't stretch across the population. Multiple levels of intensity boost capacity and make more efficient use of precious resources.

Parental needs and preferences. Parents differ widely in the amount of parenting support they need or prefer. Most parents participating in Triple P may not need or desire a longer, more intensive intervention. That's why the pyramid in figure 1 is wider at the lower levels. Even parents who might

need or benefit from the more intensive levels can partake of a low-intensity level which might in turn make them more receptive to more intensive participation.

Principle of minimal sufficiency. This public health-friendly principle means providing "just enough" intervention to solve a problem, while making more assistance available if needed. Accordingly, the lowintensity levels of Triple P help parents solve problems without heavy reliance on professional assistance. When low intensity isn't enough, parents can get more support.

Flexibility for repeat engagement of parents. Multilevel Triple P lets parents enter, exit, and reenter the system as needed. Parenting needs change as children develop and family circumstances shift, so parenting support must be accessible throughout childhood. However, we expect that parents who've participated in an effective early intervention will be less likely to need intensive intervention later.

Individual Components in the System

Level 1, the media and communication strategy, is available to all parents in a community. It offers useful information about parenting through electronic media, print and other promotional vehicles, and community events. Many Triple P communities use a level 1 platform called Stay Positive, which can be tailored to local needs. Functionally, the media and communication strategy serves several purposes. It:

conveys useful, empirically validated positive parenting tips to help parents solve child-rearing problems without relying on professional assistance;

- increases receptivity to and reduces the stigma associated with seeking parenting support, with the goal of normalizing the process of participating in family-based services;
- validates positive parenting concepts for parents who have already received Triple P services at one of the other levels:
- reinforces the workforce delivering Triple P in the community; and
- generally increases community awareness of parenting resources.

Levels 2 and 3 involve low-intensity or "light touch" delivery of Triple P. Level 2 consists of brief parenting consultations in the form of Triple P Seminars (single, standalone largegroup sessions) or Brief Primary Care Triple P (one or two contacts with a parent). Level 3 involves narrowly focused parenting support and as many as four contacts with a parent for example, via a longer version of Primary Care Triple P, discussion groups, or a brief online program.

Level 4 involves broadly focused parenting support, with programming that typically extends over three to four months. Level 5 comprises intensive family intervention, sometimes in conjunction with Level 4 programming or as a standalone Triple P program, typically over the course of four to five months.

Delivery format, which is mostly independent of intensity level, refers to how a program is implemented. Level 1 has its own formats, as described earlier. Formats for levels 2-5 include consultation with individual parents, group delivery with eight to 10 sets of parents (without the children present), large group

sessions that can vary in size from 10 to 200 parents, self-directed programming using a workbook, and online delivery. Triple P has its own terminology: in level 4, for example, "Standard Triple P" refers to the program administered to an individual family; "Group Triple P" is for delivery to eight to 10 families (weekly group sessions followed by weekly telephone follow-up with individual families), and "Triple P Online Standard" is the computer version of Standard Triple P. The variety of formats increases the Triple P system's potential reach.

Triple P programs can be grouped into two main developmental clusters. The programs mentioned thus far pertain to parents of children 2-11 years of age. The parallel Triple P programs at levels 2–5 for parents of children 12 to 16 aren't discussed in this article.

Beyond the core programs outlined above, the suite of program variants in the Triple P system has grown to meet specialized needs associated with either specific segments of the population or particular circumstances. These variants include:

- Stepping Stones Triple P: for parents of children with developmental disabilities who have, or are at risk of developing, behavioral or emotional disorders
- Lifestyle Triple P: for parents of children who are overweight or obese
- Pathways Triple P: for parents in the child protective services system due to child maltreatment
- Family Transitions Triple P: for parents going through separation or divorce
- Resilience Triple P: facilitative parenting for supporting and coaching

Table 1. Description and Applications of Core Parenting Skills Promoted through Triple P

Skill	Description	Applications				
Developing good relationships with children						
Spending quality time with children	Spending frequent, brief amounts of time (as little as one or two minutes) involved in child-preferred activities	Encourages exploration, and provides opportunities to build children's knowledge, and for children to reveal and practice conversational skills				
Talking with children	Having brief conversations with children about an activity or interest of the child	Promotes vocabulary, conversational and social skills				
Showing affection	Providing physical affection (hugging, touching, tickling, patting)	Opportunities for children to become comfortable with intimacy and physical affection				
Encouraging desirable behavior						
Using descriptive praise	Providing encouragement and approval by describing the behavior that is appreciated	Encouraging appropriate behavior (speaking in a pleasant voice, playing cooperatively, sharing, drawing pictures, reading, cooperating)				
Giving attention	Providing positive nonverbal attention (a smile, wink, or pat on the back; watching)	As above				
Having interesting activities	Arranging a child's physical and social environment to provide interesting and engaging activities, materials, and age-appropriate toys (such as board games, pencils and paper, CDs, books, construction toys)	Encouraging independent play and promoting appropriate behavior when in the community (for example, when shopping or traveling)				

Source: Matthew R. Sanders and Trevor G. Mazzucchelli, eds., The Power of Positive Parenting: Transforming the Lives of Children, Parents, and Communities Using the Triple P System (New York: Oxford University Press, 2018), 68–9. Used with permission.

children, in combination with peer relationship training, to reduce victimization and aggression toward peers and promote positive peer relationships

 Grandparent Triple P: to support grandparent-parent and grandparentgrandchild interactions and relationships

Each program in Triple P, with the exception of level 1 media programming, can operate

as a standalone intervention. Across levels, formats, and variants, the many options let organizations, communities, and regions tailor the Triple P system to meet local needs and add components over time.

Core Program Principles and Content

All programs in the Triple P system adhere to five core principles of positive parenting:

Safe and engaging environment.
 All children need a supervised and

Table 1. Continued

Skill	Description	Applications	
Teaching new skills and behaviors Setting a good example	Demonstrating desirable behavior through parental modeling	Showing children how to behave appropriately (for example, speaking calmly, washing hands, tidying up, solving problems)	
Incidental teaching	Using a series of questions and prompts to respond to child-initiated interactions and promote learning	Promoting language, problem solving, cognitive ability, and independent play	
Ask-say-do	Using verbal, gestural, and manual prompts to teach new skills	Teaching self-care skills (such as brushing teeth or making a bed) and other new skills (such as cooking or using tools)	
Using behavior charts	Setting up a chart and providing social attention and backup rewards contingent on the absence of a problem or the presence of an appropriate behavior	Encouraging children for appropriate behavior (such as doing homework of playing cooperatively, asking nicely and for the absence of problem behavior (such as swearing, lying, stealing, tantrums)	
Managing misbehavior Setting clear ground rules	Negotiating in advance a set of fair, specific, and enforceable rules	Clarifying expectations (for such things as watching TV, shopping trips, visiting relatives, going out in the car)	
Using directed discussion for rule breaking	The identification and rehearsal of the correct behavior following rule breaking	Correcting occasional rule breaking (such as leaving school bag on the kitchen floor running through the house)	
Using planned ignoring for minor problems	The withdrawal of attention while the problem behavior continues	Ignoring attention-seeking behavio (such as answering back, protesting after a consequence, whining, pulling faces)	
Clear, calm instructions	Giving a specific instruction to start a new task, or to stop a problem behavior and start an appropriate behavior	Initiating an activity (such as getting ready to go out, coming to the dinner table), or terminating a problem behavior (fighting over to do instead share, keep your hands to yourself)	
Backing up instructions with logical consequences	Using specific consequence that involves removing an activity or privilege from a child or the child from an activity for a set time	Dealing with disobedience and mild problem behaviors that do not occur often (for example, not taking turns)	
Using quiet time for misbehavior	Removing a child from an activity in which a problem has occurred and having them sit	Dealing with disobedience and children repeating a problem behavior after a logical consequence	

protective environment that is safe from danger, prevents injuries and accidents in the home and elsewhere, and is sufficiently engaging to promote healthy development. This principle is obviously compatible with concepts related to child maltreatment prevention.

- 2. Positive learning environment. From birth and throughout childhood, parents are their children's first and perhaps most important teachers. Parents can provide a learning environment that involves positive and constructive interactions and promotes the gradual acquisition of self-regulation skills. In this regard, Triple P emphasizes incidental teaching and other parenting strategies that help children ultimately learn how to solve problems for themselves.
- 3. Assertive discipline. Children need age-appropriate, proactive, and authoritative rules of conduct, guidance, and discipline. Accordingly, Triple P conveys efficacious parenting strategies that are alternatives to coercive and ineffective discipline practices or to the absence of discipline practices altogether.
- 4. Realistic expectations. For effective parenting, it's important to adopt realistic expectations about children's behaviors and competencies—that is, expectations that are developmentally appropriate and tailored to each child's current level of functioning. The same principle also pertains to parents having realistic expectations about their parenting. Inherent in this is the need to examine expectations, assumptions, and beliefs about the

- causes of children's behavior, and to make adjustments accordingly.
- 5. Parental self-care. A parent's stress level, self-esteem, health, and sense of wellbeing can all affect parenting. Triple P encourages parents to consider that the larger context for parenting includes personal self-care, empowerment, and emotional and physical wellbeing.

These core principles can be applied broadly and are consistent with the recommendations of other behavioral scientists, such as Laurence Steinberg of Temple University, whose "basic principles of good parenting" share similar themes. 12

Triple P draws on many parenting strategies, clustered into four categories: developing good relationships with children, encouraging desirable behavior, teaching new skills and behaviors, and managing misbehavior. Table 1 describes the parenting skills in each category promoted through Triple P and explains how each skill is applied to child development.

Evidence and Impact

We have two types of evidence for the impact of Triple P on children and families. The first and by far the larger consists of studies on the individual levels and programs in the Triple P system. These studies of individual components provide an essential foundation for a viable system. The second type of evidence consists of three large studies evaluating the population impact of the whole Triple P system.

Individual Triple P Programs

Studies on the individual programs and elements of the Triple P system cut across age groups, applications, intensity levels, delivery formats, settings, populations, and nations. The early studies, conducted three decades ago, tested and refined the parenting strategies that would ultimately form part of the Triple P toolkit. Much of this research was based on intensive single-case experiments delivered in families' homes. The initial singlecase studies gave way to group clinical trials and evaluations of interventions that involved more than one parenting strategy. Over the years, the evidence surrounding Triple P has grown substantially. As of June 2018, 321 evaluation studies had been conducted, including 164 studies that randomized families to Triple P versus a comparison or control condition. Researchers examined a variety of populations and problems, such as:

- General population
- Child conduct and related behavior problems
- Specific child issues such as bedtime, mealtime, and recurrent abdominal pain
- Childhood anxiety disorders
- Chronic illnesses such as asthma
- Childhood obesity
- Children with autism spectrum disorder or intellectual/developmental disabilities
- Bullying victims
- Gifted and talented children
- Children in natural disasters

Although most Triple P studies concerned the prevention or reduction of child behavior problems, some studies looked at several other facets of child and family functioning, adding to the utility of the system.

A systematic review published in 2014 examined 101 Triple P outcome studies across levels and formats, child populations, and prevention categories (universal, selective, or indicated).¹³ Collectively, the studies have shown that Triple P programs have a fairly consistent and statistically significant positive impact on parents and children. Beyond statistical significance, it's important to know the magnitude of the effects, which statisticians measure in *effect sizes* (ES). These usually run from close to zero, which means no effect, to 1.0 or higher. An ES around .2 is considered a small effect, around .5 a medium effect, and around .8 a large effect.¹⁴ Studies of Triple P programs have shown medium effects, on average, for outcomes such as:

- Parenting practices (ES = .47)
- Child social, emotional, and behavioral adjustment (ES = .47)
- Observed child behavior (ES = .50)
- Parenting satisfaction and efficacy (ES = .52)

Studies have shown that Triple P programs have a fairly consistent and statistically significant positive impact on parents and children.

Not every study of Triple P has found positive results. For example, eight studies tested Level 4 Group Triple P in a universal context, each using a sample

of 150 families or more. Seven of the eight showed positive results, but one, which was conducted in Switzerland, failed to find positive effects despite using a welldescribed research design and appropriate measurements. 15 The Swiss study delivered the program in schools, which might not have suited parents as well as other venues, and problems related to implementation may have affected the results. Overall, 4.4 percent of Triple P studies have failed to find positive effects. This percentage is within the range that we might expect to occur by chance. Still, it's important to learn from such studies. Researchers are finding that insufficient attention to how well a program is implemented can produce poor outcomes in studies and dissemination.¹⁶

Evaluation of Population Impact

Studies of individual Triple P programs are an essential foundation for the Triple P system, but they can't substitute for evaluation of population impact. To date, three published studies have evaluated the impact of the whole system; these are summarized in Table 2.

First, the Every Family prevention study examined how Triple P affected prevention of social, emotional, and behavioral problems among four- to seven-year-olds. ¹⁷ The intervention encompassed all five levels of the Triple P system. Levels 2–5 were delivered in community, health, and school settings by child health nurses, general practice physicians, school nurses, mental health services staff, and family intervention specialists. Level 1 included social marketing and health promotion, information about positive parenting, links to services, and communications to counter parent-blaming messages in the media. A cross-promotional

strategy involved both print and electronic media—for example, via newspaper columns about positive parenting, resource materials for parents (available at preschools, schools, childcare centers, and libraries), radio segments, and televised public service announcements.

To measure outcomes, a telephone survey randomly sampled households on two occasions three years apart, before and after implementation of Triple P. Independent interviewers not involved with Triple P conducted the computer-assisted survey. Intervention and non-intervention communities were matched on socioeconomic and racial/ethnic characteristics before comparison.

Parents in the intervention communities reported significantly lower rates of coercive parenting, parental depressive symptoms and stress, and child emotional and psychosocial difficulties. The study found no significant effects on parenting confidence and social support, or on children's prosocial behavior. Overall, the study showed that it's possible to have a population-level impact on coercive parenting and children's behavior problems around the time they start school, as an alternative to selecting out a small segment of children for special intervention.

Second, a population-level study in Ireland tested the Triple P system's impact on childhood conduct problems, focusing on parents of children aged three to seven. 18
The intervention consisted of levels 1–4 of the Triple P system. A level 1 social-marketing strategy involved newspaper columns, websites, mass emails, posters, and flyers. The program was implemented by a partnership of several nonprofit and governmental organizations, including family

resource centers, community development initiatives, childcare facilities, preschools and schools, and general practitioners. The program's population penetration was approximately 34 percent among parents of children in the targeted age range. The evaluation of outcomes compared large catchment areas that were matched according to poverty levels, demographic characteristics, and urban/rural proportions. Based on an appropriate sampling of households separate from participation in Triple P, the evaluators conducted faceto-face parent interviews. The Triple P communities showed a substantial reduction in the percentage of children with conduct problems (and other behavioral and emotional problems) that fell in either the clinical or the borderline range, compared with children in communities that didn't receive the program. Other reported benefits included improved parenting, higher parental confidence, and lower parental stress, though evaluators found no significant increase in children's prosocial behavior. Overall, the Ireland study found that Triple P had a positive impact on children and families, which was attributed in part to careful attention to the quality of implementation.

Third, a population trial funded by the US Centers for Disease Control and Prevention examined the Triple P system's impact on child maltreatment. 19 The study tested whether community-wide parenting support could reduce population rates of child maltreatment. Answering this question required a rarely used "place randomization" design, in which geographic places, in this instance counties in South Carolina, were randomly assigned to the study conditions. The 18 mid-sized counties, none of which had prior exposure to Triple P, were picked geographically rather than recruited in any

way. After matching for poverty rates, child maltreatment rates, and population size, the 18 counties were randomly assigned to either the Triple P system (intervention) or services as usual (control).

In the nine Triple P counties, program implementation drew from the existing workforce in several service sectors members of nongovernmental organizations, preschool and day care directors, staff at public health centers, personnel in elementary schools (such as counselors, parent educators, and kindergarten teachers), mental health workers, and clergy with counseling backgrounds. All of these received professional Triple P training. The level 1 communication strategy involved local newspapers, radio, newsletters at schools, mass mailings to family households, presence at community events, and website information. The goal was to convey positive parenting information, model parental success stories, normalize parenting support, and empower parents to solve child-rearing issues.

The evaluation focused on all households with at least one child under the age of eight years (that is, between birth and eight years old). Three administrative data systems, each with its own reporting procedures, provided the indicators for measuring outcomes: (1) substantiated child maltreatment cases reported by the child protective services system; (2) child out-of-home placements reported by the foster care system; and (3) hospital-treated maltreatment injuries reported by the health-care system. The two sets of counties were statistically compared going back five years before Triple P to verify that existing differences or diverging trends wouldn't account for the results. None of the three indicators yielded significant pre-

Table 2. Population-Based Studies of the Triple P System of Parenting Support

	Every Family Study	Ireland Midlands Area Partnership Triple P System Trial	US Triple P System Trial
Location	Australia	Ireland	South Carolina, US
Geographic units	20 catchment areas	Four regions	18 counties
Child age ranges	Four to seven years	Four to eight years	Birth to seven years
Population size	3,004 families or households	3,065 families	195,388 children
Evaluation method	Comparison of matched communities before and after exposure to Triple P system	Comparison of matched regions before and after exposure to Triple P system	Counties randomized to intervention or control, adjusting for five years prior to study
Intervention elements	Media/communication (L1); parenting seminars, brief consultation (L2); primary care (L3); group (L4); enhanced (L5)	Media/communication (L1); parenting seminars (L2); discussion groups (L3); group (L4)	Media/communication (L1); parenting seminars, brief consultation (L2); primary care (L3); group/individual (L4); enhanced (L5)
Delivery agents	275 trained practitioners	68 trained practitioners	649 trained practitioners
Main outcomes	Significant impact on child behavior problems, parenting for misbehavior, parental depression; nonsignificant for positive parenting	Significant impact on child behavior problems; lowered proportion of children above clinical threshold for conduct and emotional problems	Significant reduction in child maltreatment cases, out-of-home placements, and hospital-treated maltreatment injuries

study differences between the two sets of counties or significant diverging trends over time.

The Triple P system demonstrated a preventive impact on all three indicators. Compared with the control counties, and taking into account initial prevalence levels, counties exposed to the Triple P system saw significantly lower rates of substantiated child maltreatment (ES = 1.34), out-of-home placements (ES = 1.06), and hospital-treated maltreatment injuries (ES = 1.01)—with large effects for all three outcomes.

This population study demonstrated that it's possible to lower child maltreatment rates by providing parenting support to an entire community in the form of the tiered Triple P system. Ideally, researchers elsewhere would try to replicate this population study, but the likelihood of repeating this type of research design is low. A replication would require randomizing many counties or sufficiently large communities with no prior exposure to Triple P, to the Triple P system versus services as usual. Conversely, evidence for population outcomes is emerging in communities where Triple P has been adopted. For example, Santa Cruz County in California implemented the full

Triple P system and documented gains over a five-year period.²⁰ At least 9,000 parents participated in Triple P services, potentially affecting more than 16,000 children. The evaluation documented significant reductions in adverse parenting practices and child behavior problems in the Triple P families. More importantly, Santa Cruz County observed a 22.7 percent reduction over four years in the rate of substantiated cases of child maltreatment. compared with a 6.3 percent reduction for all of California.

Implementation and Quality Assurance

After several decades of evidence-based programming, researchers and policy makers are recognizing that scientific evidence for an intervention is necessary but not sufficient for success. The other crucial ingredient is dedicated attention to the quality of implementation.²¹ No matter how solid the evidence for a program, implementing it poorly will yield little or no impact.²² A public health-oriented, multitiered prevention system like Triple P presents many complexities and challenges for implementation. Accordingly, current efforts to disseminate Triple P focus much more on implementation than they did a decade ago.

Scientific evidence for an intervention is necessary but not sufficient for success. The other crucial ingredient is dedicated attention to the quality of implementation.

The Triple P Implementation Framework has emerged as a way to help communities and policy makers with planning and quality assurance.23 This framework, summarized below, guides communities that adopt Triple P through a sequence of activities intended to promote effective service delivery and sustainability:

- 1. Engagement of organizations to determine program fit and readiness
- 2. Specification of, and commitment to, outcome goals, program choices within the Triple P system, number and selection of delivery practitioners, leadership teams, and community partnerships
- 3. Implementation planning for internal support of the delivery workforce via supervision, professional peer support, and coaching; monitoring and evaluation process (including assessment of program-delivery fidelity and targeted outcomes); and initial development of structural and financial plans for sustainability or expansion
- 4. Systematic training and accreditation of practitioners selected by the adopting organizations to deliver the various levels
- 5. Ongoing implementation and maintenance involving (a) quality improvement driven by monitoring data, (b) guidance from leadership and implementation teams, (c) addition or expansion of level 1 media and communication, (d) workforce replenishment, and (e) installation of additional components from the Triple P system to meet emerging community needs.

Culturally and Economically Diverse Populations

Triple P has been implemented with a broad array of families in culturally and economically diverse communities, including:

- Indigenous communities in Australia
- Maori populations in New Zealand
- First Nations peoples in North America
- Low- and middle-income countries (for example, Kenya and Panama)
- Counties in California and North Carolina with substantial Hispanic, African American, and Asian American populations

Opinions solicited directly from parents suggested that Triple P's core principles and parenting strategies are cross-culturally robust, but that doesn't mean the program might not need to accommodate and adapt to different populations. ²⁴ Triple P approaches diversity of communities and families in two ways: flexible delivery and formal adaptation. ²⁵

Flexible delivery refers to facets of the program that allow the content and process to be tailored without sacrificing vital aspects. For example, Triple P practitioners defer to parents in choosing child behavior goals, as well as choices among parenting strategies. This tailored approach lets parents bring cultural and personal values and preferences to bear on how they use the program. Practitioners can take cultural and family contexts further into account when delivering Triple P. For example, they can vary their communication style to make parents feel comfortable. More importantly, practitioners can choose illustrative parenting

and child examples compatible with the family's personal and cultural experiences. Finally, organizations can deploy a Triple P workforce, including supervisors, that reflects the cultural and racial makeup of the communities being served.

Formal adaptation of Triple P to specific cultures or countries, though less common, has occurred. For example, Triple P developed a collaborative partnership adaption model and applied it to indigenous Australian and New Zealand Maori communities.²⁶ In brief, the model involves:

- establishing a collaborative partnership with the community
- assessing cultural acceptability of the existing program and soliciting input from parents, practitioners, and community leaders throughout the process
- making changes in the language, content, and delivery process
- · evaluating the adapted program
- scaling up the program with respect to training, ongoing evaluation, support, and sustainability

In New Zealand, one cultural adaptation involved altering resource materials and illustrating how Triple P principles and local tribal customs can work together to build parenting skills. The process is continuing, but initial evaluations show that adaptations of Triple P can produce positive outcomes.²⁷

Benefit-Cost and Funding Considerations

Recently, the Washington State Institute for Public Policy (WSIPP) conducted a benefitcost analysis of the Triple P system. With respect to prevention of child maltreatment, WSIPP determined that a benefit of \$9.29 would be returned for every dollar spent on Triple P, based on a cost of \$152 per child in the population. WSIPP also estimated benefit-cost ratios for level 4 Triple P programs with respect to reducing children's disruptive behavior problems, and found a benefit return of \$4.47 for Group Triple P and \$3.36 for Standard (individual family) Triple P per dollar spent. These estimates were based on costs of \$367 per family and \$992 per family, respectively.

Funding to implement Triple P varies across jurisdictions and often involves blended financial arrangements. Sources of funding for Triple P in the United States typically include state agencies (child and family services, health, public health, mental health, and social services), philanthropic and nongovernmental entities, federal grants, and primary care systems.

Significant Challenges

Most studies on Triple P's effectiveness have focused on individual programs; only a handful have tested the system as a whole. This isn't by chance. Population trials especially those involving randomization of communities—are complex, costly, and difficult to procure. But such trials are important to keep moving forward. Researchers teaming with state public health departments will need to devise carefully crafted evaluations involving geographic catchment areas.

In public health terms, *penetration* refers to the proportion of individuals in the population reached by a prevention strategy. Sufficient penetration is critical for a population-based intervention like Triple

P. When population impact is not the goal, interventions with individual families can be successful without substantial penetration. By contrast, an intervention like Triple P could succeed in helping some families but fall short because it didn't reach enough of them. It's an open question how much penetration the Triple P system needs to alter, for example, population indicators of child maltreatment. Similarly, we need more work on ways to increase penetration, such as how to engage more service sectors and settings, make greater use of online programming, and optimize positive social contagion.

A related problem concerns population measures. For child maltreatment, archival records work well as long as the community, county, or state is large enough to reliably detect changes in prevalence rates. Population measures of children's social, emotional, and behavioral problems are harder to come by, as are measures of parenting practices other than "official" maltreatment.

Installing a parenting support system like Triple P doesn't mean that nothing else needs to be done to reduce child maltreatment.

The most common forms of child maltreatment are neglect, physical abuse, or a combination of both. The extent to which a population approach to parenting support like Triple P might specifically prevent neglect is not known. However, in most neglect cases the parents also struggle with common parenting challenges that

might be ameliorated by parenting support interventions. In reality, the categories of neglect and physical abuse aren't very distinct, which suggests that strengthening parenting can help prevent both.28 It almost goes without saying that prevention of neglect also needs to involve elimination of adverse conditions related to housing, hunger, absence of medical care, and other sources of deprivation.

Installing a parenting support system like Triple P doesn't mean that nothing else needs to be done to reduce child maltreatment. We would benefit from research that tests the impact of combining Triple P with intervention or policy strategies related to, for example, primary health care, parental substance use, or food insecurity.

Conclusions

Parenting affects many aspects of child development, including but not limited to child maltreatment. Reaching large segments of the population through evidence-based parenting support could have considerable benefit to society. The Triple P—Positive Parenting Program system builds on this

premise. Structurally, Triple P aims for community- or population-wide implementation through a multitiered system of programs of increasing intensity, drawing on a variety of delivery formats to fit parental preferences and needs. As a blended approach to prevention, the system promotes universal access while incorporating targeted components to reach a variety of parents. We have much evidence for individual programs in the Triple P system, and evaluations of the whole system show promise for preventing behavioral/emotional problems and problematic parenting practices, including child maltreatment. Greater emphasis on implementation will likely raise Triple P's potential further.

Having a cogent parenting support system in place doesn't obviate the need to address other critical issues. Parenting support can and should work hand in hand with other efforts, such as programs to address the toxic elements of poverty, full access to efficacious treatment for parental substance use, early childhood education, and access to adequate health care.²⁹

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