### Special Report

# Reducing Corporal Punishment of Children: A Call for a Regional Effort<sup>1</sup>

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#### A CASE FOR ACTION

Few violations of human rights awaken greater societal concern and repugnance than those perpetrated against children. Yet the number of reports of child maltreatment not only has reached overwhelming proportions but seems to be continuing to rise (1). The scientific literature and the media often report on children being subjected to violence at home, in the community, and at school. In the United States of America, 2.7 million children were reported abused or neglected in 1991 (2). In Brazil, merchants are believed to have ordered the murder of street children because they were perceived as a public nuisance (3).

In some countries of the Americas, the future does not bode well with regard to child maltreatment, owing to the spread of all types of violent behavior and mounting social ills such as premature parenthood, divorce, substance abuse, and the disruption of social support groups as a result of migration to urban areas.

Reluctantly in some countries, less ambivalently in others, the health sector has joined with other social sectors in addressing the problem of violence, recognizing that it has adverse effects on health and that the multiple determinants and expressions of violence (abuse, neglect, homicide) require a multifaceted approach to control and prevent it (4).

Since the 1960s, when battered child syndrome was described and labeled (5), the literature on violence against children has expanded rapidly. Despite research efforts, there is much that remains unknown about the epidemiology, etiology, and mechanisms involved, as well as the most effective interventions to prevent violence against children (1). It is our contention, however, that the knowledge accrued so far is adequate to build "a case for action" (6) and to develop intervention programs that are scientifically grounded.

Conceptually and operationally, program development in the area of interpersonal violence is facilitated by the emergence of health promotion as a legitimate field of action, as defined by the

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Ottawa Charter for Health Promotion (1986) and similar position statements. Health promotion seeks to produce healthy lifestyles—a part of which is replacement of violent behavior with peaceful communication—as a strategy to enhance health in communities.

This paper will review one type of violent behavior against children—corporal punishment—and will delineate a regional initiative for its prevention and control, with intervention strategies rooted in communityoriented primary health care, social communication and health education, and the promotion of healthy public policies.

### CORPORAL PUNISHMENT: AN OVERVIEW

Corporal punishment is defined as the infliction of pain with the purpose of modifying behavior perceived as undesirable by the person in charge of disciplining a child. It includes means such as spanking, slapping, grabbing, shoving, and hitting with objects (7). Corporal punishment is the most frequent violent behavior against children. Straus (7) found that over 90% of parents in the United States use it in an attempt to exert discipline. One might be tempted to discount findings from the United States, a country with relatively high violence statistics (1). But even in countries that do not have a reputation as violent, corporal punishment is practiced at home. For instance, Tonella and Zuppinger (8) report that in Switzerland, a country that has been spared war for centuries, one-third of the parents use corporal punishment. In Costa Rica, a country that abolished its national army in the late 1940s, Krugman et al. (9) found that 82% of the male university students and 77% of the female students surveyed acknowledged that they had been spanked at least once in their lives. Furthermore, 35% of the

male students and 25% of the female students had experienced whipping or flogging. The study also showed that abuse took place mainly between the ages of 5 and 10.

The widespread frequency of this phenomenon may lead to the mistaken conclusion that it is a normal societal event and thus hardly merits intervention by the health sector. But the fact that it is frequent does not imply that there are no adverse health effects. McCormick (10), after reviewing several sources, stated that "corporal punishment contributes to the problem [of violence] by serving as a model of problem solving using interpersonal violence . . . ; [it] is ineffective and even counterproductive as a child rearing strategy." By example, adults tell children that spanking, slapping, and other violent means of discipline are acceptable and necessary. Also implicit in this message is that those who have more power can use it against those who have less—or none, in the case of the adultchild interaction.

Empirical evidence on the immediate and late effects of physical discipline is now available. Holmes and Robins (11), in the United States, carefully examined the role of parental disciplinary practices in the development of depression and alcoholism by checking both parental psychiatric history and socioeconomic status. Their case-controlled study relied on an examination of 200 respondents chosen from the National Institute of Mental Health-St. Louis Epidemiologic Catchment Area site. They concluded that "harsh and inconsistent childhood discipline appears to be an important predictor of depression and alcoholism in adulthood in families with and without sick parents and in both poor and wellto-do families." The putative effect of corporal punishment on self-esteem (12), aggressive behavior (13), and the child's moral development (14) has also been

pointed out. Straus and Kaufman Kantor (15) argue that available data seem to suggest that corporal punishment in adolescence may be a risk factor for depression, suicide, alcohol abuse, physical abuse of children, and physical assault on wives.

Corporal punishment is not restricted to the home but can happen at school as well. The American Medical Association (AMA) defined this type of violence as the "intentional infliction of pain or discomfort and/or use of physical force upon a student as punishment for an offense or behavior" (16). Corporal punishment is still legally used in schools in many states of the United States. The American Academy of Pediatrics estimated in 1991 that corporal punishment was being administered 1-2 million times per year (17). In other countries of the Americas, little is known about the frequency of corporal punishment in schools, but it is known to occur. Anderson and Payne (18), for example, documented its use in Barbados.

Corporal punishment at school constitutes a violation of human rights; furthermore, it is not free from adverse effects—physical, psychological, and academic (17, 19, 20). Following a review of its effects, the AMA advocated its abolition (16), as have other professional organizations, but the practice has not yet been discontinued.

There are additional reasons to advocate eradication of corporal punishment at school and at home. The line between physical methods of discipline and child abuse is far from clear. The harsher the disciplinarian method used, the more blurred the dividing line becomes and the higher the risk to the child's life and health. It has been said that "societal permission to use corporal punishment is the child's ticket to victimization" (10). Belsky (21) concurred, stating "it is doubtful that maltreatment can be eliminated so long as parents rear their off-

spring in a society in which . . . corporal punishment is condoned." Furthermore, even though Kaufman and Ziegler (22) and Widom (23) have cautioned against the facile conclusion that abused children become abusive parents or that violence in childhood necessarily leads to later violent or criminal acts, there are grounds to suspect that those who experience violent behavior in childhood are prone to replicate it in adulthood. Buntain-Ricklefs et al. (24), in a cross-sectional survey carried out in several teaching pediatric clinics in two states in the United States. showed that "the strongest risk factor for approving of any type of punishment [physical or emotional] was having experienced that punishment as a child." Vargas et al. (25) found that among a group of parents/guardians (n = 527) in Chile there was a high probability (odds ratio = 4.9) that parents who had been punished physically in their childhood would use the same means with their own children. Hemenway et al. (26) agreed with such a conclusion; these authors noted, however, that there are parents who succeed in breaking the cycle of violence. Fry (27), using an anthropological approach, documented the intergenerational transmission of violence at the community level by studying two neighboring villages in Mexico. Both were Zatopec communities, but they had contrasting levels of violence, as measured by fighting, wife beating, assaults, and homicide. The communities differed in their patterns of child rearing, the more pacific one advocating positive verbal strategies for discipline while corporal punishment was more frequent in the other. Most of the studies mentioned above were not entirely free from some methodological limitations; taken together, however, they indicate that evidence from research justifies the worry that violence begets violence. It should be noted that in cultures in which physical punishment is rare, child abuse is quite unusual (21).

Health promotion, in striving to produce well-being and a higher quality of life, advocates the replacement of all violent behavior with pacific means of communication, whether or not the current or future damage to the individual's health is marked or minimal. In promoting this change, the health sector will help society to respect the rights of children—the only group in society against which corporal punishment for the sake of discipline is still tolerated.

## INTERVENTION: OBSTACLES AND STRATEGIES

The introduction of community-based programs to reduce or abolish corporal punishment is bound to meet with formidable opposition that stems from several sources. The first obstacle will be the culture itself, inasmuch as it sanctions corporal punishment as an integral component of child-rearing practices and school discipline. For instance, in the West Indies the long-standing use of corporal punishment in child discipline seems to have its origin in the traumatic history of the peoples in those countries (28). A recent study on a population in a Mexican state (29) reports that the practice of corporal punishment is supported by societal beliefs about the benefits of its corrective effects, and accordingly, the practice receives positive sanction from state law.

It is thus not surprising, given the widespread cultural approval for the use of physical discipline, that protective legislation on this issue around the world is more the exception than the rule. Indeed, the case of Sweden remains unique: this country not only legislated against corporal punishment in schools but went so far as to prohibit physical punishment by parents as well (30).

The second obstacle may stem from the perpetrators. As noted above, so many parents use corporal punishment (90% in the United States—7; at least 60% in Chile, according to a survey of parents/guardians of schoolchildren in three grammar schools in Santiago—31) that it may be seen as a behavior that needs no modification. To promote such a change, it is proposed that the following three actions be taken simultaneously: to make it dissonant, to persuade parents that other means of discipline are just as effective or even more so, and to equip them with the tools to use these other means.

In schools, important changes have taken place to eradicate corporal punishment as a disciplinary measure following educators' discussion of the subject. In the United States, for example, several states and a number of large cities have abolished corporal punishment in schools, but in many more it is still legal. Not all teachers and school authorities have yet become knowledgeable about the adverse effects of corporal punishment nor the existence of alternative means of control. Among the available effective means of behavioral control listed by the Office of the General Counsel of the AMA (16) were praise, role modeling, and student involvement in the development of disciplinary codes.

The third obstacle to the introduction of a community program may, paradoxically, be the former victims. A study conducted in Barbados on students' opinions on corporal punishment at school showed that the majority of boys and girls interviewed stated that the current level of flogging/caning experienced at the hands of school authorities was "about right" or "not enough." Only a relative minority of the boys and girls (47% and 29%, respectively) viewed it as applied "too often" (18). Vargas et al. (32), in a sample of schools in Santiago, Chile, found that 63% of the pupils of a mu-

nicipal school and 25% of those attending a private school said the use of physical means of discipline by parents was justified. Rausch and Kuntson (33) investigated the retrospective assessment by students at a U.S. university of the extent that they or a sibling experienced physical punishment during childhood. The respondents were nearly twice as likely to report having a sibling who had been physically abused as they were to label themselves as physically abused. Although the study may be biased by the fact that a respondent could have selected for contrast the sibling most vulnerable to physical punishment in the family, several subtests in the study showed that "persons from severely punitive backgrounds are unlikely to classify their [own] experiences as abusive" (33). Other studies (for example, 34) agree with such findings. Weller et al. (35) showed that physically punished adolescents—who had reached a developmental stage in which corporal punishment is less frequently used by parents or guardians than it is on children (7) were more prone to recommend it as a method to control misbehavior than those who had not experienced physical punishment. Socolar and Stein (36), who studied beliefs about spanking among mothers attending two socioeconomically contrasting U.S. clinics (n = 204), found that a history of being spanked as a child was significantly associated (P < 0.002) with belief in that form of discipline. On the other hand, Carlson (37), using a different methodology, found that 9 to 12-year-olds were able to choose alternative methods of discipline when confronted with vignettes depicting different types of child misbehavior. Despite the latter study, the bulk of evidence shows that subjects tend to downplay the nature and extent of the discipline they themselves received. This, in turn, may impede their insight into these experiences and lessen the possibility of modifying their practices.

The fourth obstacle may arise from health workers. In schools and other community settings the pediatrician should be "an initiator, educator, collaborator, and advocate" of violence prevention (38), in addition to the more traditional role he or she can play in clinical practice (see below). Yet studies have found that primary care doctors, family physicians, or pediatricians may be reluctant to become involved in this area owing to the limited training they received in the subject and because they are influenced by personal experiences and values. A study conducted in an inner-city pediatric clinic in the United States found that physicians "were relatively unaware of parental concern and distress about child behavior" (39). Only 27% of 89 mothers that reported to the researchers that physically abusive levels of violence were taking place within the family had been identified by the physicians. Sugg and Inui (40), using quantitative methods to investigate the attitudes of physicians (mostly family practitioners) who worked in a U.S. health maintenance organization, noted the marked reluctance of these physicians to deal with issues related to domestic violence. The subtitle of that paper, "opening Pandora's box," reproduces the most frequent explanation given by doctors for shying away from the subject. In a survey conducted in the United States, which was affected to some extent by a high noncompliance rate, Morris et al. (41) found that 90% of the 58 physicians interviewed thought that "to spank bottom with an open hand, lightly" was not inappropriate discipline; 55% thought that "to spank bottom with an open hand, leaving red" was not inappropriate; while 28% thought that "to spank with belt, etc., lightly" was likewise not inappropriate. McCormick (10) conducted a study in Ohio, U.S.A., on a larger sample of pediatricians and family physicians, obtaining a response rate of 61%. His results showed that 67% of the respondents would support corporal punishment given a certain situation (e.g., child runs into the street without looking). The family physicians in the sample were more likely to support it (70%) than the pediatricians (59%). Interestingly, younger physicians supported it more often than older practitioners.

Lastly, an organizational obstacle to the successful implementation of a program on this and related subjects, such as domestic violence, stems from the mental health care system in some countries of the Americas. Following a traditional model of care, the specialized personnel—psychiatrists, psychologists, etc. operate apart from the general health services; this impedes the training of primary health care workers in the identification and management of psychosocial problems they may encounter in their practice. On the other hand, the movement that has begun in the Region to transfer services into the community facilitates coordination and consultation between the specialist in human behavior and the primary health worker (42).

The need to devise appropriate intervention strategies to overcome the abovementioned obstacles is clear. The following proposed model program attempts to answer that need.

### A MODEL PROGRAM

Kark (6) delineated the steps of an epidemiologically oriented community-based program in order to provide a scientific basis for the actions developed in such a context (see Figure 1). The program to limit or eradicate corporal punishment, described below, adheres to this model.

The development and implementation of this program is complex and long range,

**Figure 1.** Steps in a community-based program to reduce or eliminate corporal punishment.



requiring several steps. It will commence with program trials (43) in one or two countries to develop and test the required methodologies, including indicators, and to investigate the feasibility, acceptability, and effectiveness of the interventions. This initial stage will be followed by additional tests in four or five diverse countries before a model program, adapted to local conditions, can be implemented more widely in the countries of the Region. In keeping with the outline of Fry (27), the model program will initially include all or most of the components described below, since at this stage the relative contribution of each of them to the effectiveness of the intervention is not certain.

### Components of the Model Program

The modification of cultural beliefs, attitudes, and practices that support corporal punishment and its replacement with alternative means of behavioral control will be the chief targets of the following interventions: social communication, health education, and the formulation and adoption of public policies and legislation.

In recent years, considerable advances have been made in increasing the effectiveness of health communication through both the media and interpersonal contact. Recent research findings indicate that theory-driven health communication programs based on well-defined targeting strategies have been effective forces to promote health and wellbeing (44, 45), thus making both social communication and health education suitable measures to promote modifications in beliefs and practices. The communication/behaviorchange framework provides an appropriate perspective on how individuals and groups acquire new knowledge, attitudes, and behaviors. Several researchers have contributed to this understanding, among them Cartwright (46), on the role of interpersonal influence as a needed trigger for action; McGuire (47), with the communication-persuasion model; Bandura (48), with the social learning model; and others.

Health education constitutes a key strategy in providing participative learning opportunities and creating environments conducive to engaging people of all ages in learning about their health behavior, both individual and collective. In this initiative both social communication and health education strategies will be used in combination, since it is expected that they will complement and potentiate each other.

Collective interventions targeting attitudinal and behavioral changes will be conducted in the community with parents, parents-to-be, grandparents, and key community leaders, including the clergy, for the purpose of advocacy, mutual support, and assistance in the spread of information about alternative methods of discipline. At schools, work will be conducted with separate or mixed groups of teachers, school administrators, parents,

and students. Needless to say, the training of teachers in the control of behavior is of paramount importance, since their ease in moving from one type of discipline to another will depend on their command of alternative methods and the support made available to them. The school curriculum will need to emphasize components related to all forms of violence and to the promotion of peaceful communication to reduce the likelihood that school authorities will react with violence to incidents of misbehavior.

The fact that there are cultures in which corporal punishment is seldom or never used (see, for example, references 21 and 27), gives reason to be hopeful regarding the success of these intervention strategies.

Regarding legislation, it is worth noting that the introduction of legislation abolishing corporal punishment by parents in Sweden was preceded and accompanied by additional measures, since legislation was not deemed to be a sufficient response by itself; information policy, parent training, and activities by child protection organizations were also adopted (30). A survey by a Swedish opinion research institute found that over the years 1961-1981 there was a steady decline in the number of parents who believed that children should be given corporal punishment from time to time and, conversely, a steady increase in parents who thought that corporal punishment was not an appropriate way to bring up children (49).

Legislation to banish corporal punishment in schools is more widespread than legislation referring to similar methods of discipline by parents or guardians. Nevertheless, it has yet to be adopted and/or enforced in all countries of the Americas.

The program will be centered around the primary health care setting. Two strategies will be used in this context: (1) inclusion of behavior control in children as one of the subjects dealt with by the doctor and/or nurse during antenatal (50) and postnatal (51) clinic visits, and (2) home visitation by community health workers or trained volunteers.

Wissow and Roter (39), in addition to appealing to "clinicians as a group . . . [to] demonstrate a united stand against the use of violence within families," discussed different intervention strategies in the practice setting aimed at clarifying for parents the difference between discipline and punishment and the ways to enforce the former and reduce/abolish the latter. In order to be able to intervene, primary health care workers will need to become sensitive to the problem and to receive training on ways to counsel parents and on the promotion of nonviolent disciplinary measures (52). Professionals from the behavioral sciences will be called on to collaborate in the training programs.

Regarding home visitation, this type of intervention has proved very effective as a means of reducing violence against children. Olds et al. (53) conducted a randomized trial of a home visitation program by nurses to mothers in high-risk situations, e.g., teenaged, unmarried, or of low socioeconomic status. A number of favorable results were reported, such as fewer visits to the emergency room. Of interest is that "within the group at highest risk . . . the nurse-visited women were observed in their homes, when their babies were 10 and 22 months of age, to punish and restrict their children less frequently [to a statistically significant degreel than were their counterparts in the comparison group."

In schools, a nurse or psychologist, if the latter is available, is the health worker best positioned to encourage school personnel to adopt newer practices. The guidelines to the pediatrician working in educational settings provided by Poole et al. (54) can help that professional reinforce the activities of the former two categories of health workers.

#### CONCLUSION

This paper has reviewed the case for action and sketched the outline of a community-based program to reduce the practice of corporal punishment at home and in schools in selected countries of Latin America and the Caribbean. This regional effort is only now beginning and, admittedly, its goals are almost as distant as the horizon. The authors are fully aware that the initiative has a quixotic quality; however, in the face of the violence crippling our communities, we are left with no other option.

### REFERENCES

- Reiss AJ, Roth JA, eds. Understanding and preventing violence. Washington, DC: National Academy Press; 1993.
- Hoekelman RA. Doom and gloom again what we can do about it. *Pediatr Ann* 1992;21:471–472.
- Cruz Neto O, Minayo MC. [Violence and banalization of life.] Cad Saúde Pública 1994;10(suppl 1). (In Portuguese).
- Pan American Health Organization/World Health Organization. Health and violence—Regional Plan of Action. Washington, DC: PAHO; 1994. Document PAHO/HPP/94.11.
- Kempe CH, Silverman F, Steele B, Droegemueller W, Silver H. The battered child syndrome. *JAMA* 1962;181:17–24.
- Kark SL. Epidemiology and community medicine. New York: Appleton-Century-Crofts; 1974.
- Straus MA. Discipline and deviance: physical punishment of children and violence and other crime in adulthood. Soc Probl 1991;38:133–153.
- 8. Tonella A, Zuppinger K. L'enfant maltraite et negligée en Suisse. *Schweiz Med Wochenschr* 1994;124:2331–2340.
- Krugman S, Mata L, Krugman R. Sexual abuse and corporal punishment during childhood: a pilot retrospective survey of

- university students in Costa Rica. *Pediatrics* 1992;90:157–161.
- 10. McCormick KF. Attitudes of primary care physicians toward corporal punishment. *JAMA* 1992;67:3161–3165.
- Holmes SJ, Robins LN. The role of parental disciplinary practices in the development of depression and alcoholism. Psychiatry 1988;51:24–36.
- 12. Oates RK, Forrest D, Peacock A. Self-esteem of abused children. *Child Abuse Negl* 1985;9:159–163.
- Weiss B, Dodge KA. Some consequences of early harsh discipline: child aggression and a maladaptive social information processing style. *Child Dev* 1992;63:1321–1335.
- Hoffman ML, Saltzstein HD. Parent discipline and the child's moral development. J Pers Soc Psychol 1967;5:45–57.
- Straus MA, Kaufman Kantor G. Corporal punishment of adolescents by parents: a risk factor in the epidemiology of depression, suicide, alcohol abuse, child abuse, and wife beating. *Adolescence* 1994;29:543– 561.
- American Medical Association/Office of the General Counsel. Corporal punishment in the schools. JAMA 1992;267:3205– 3208.
- American Academy of Pediatrics/Committee on School Health, 1990 to 1991.
  [Report]. Pediatrics 1991;88:173.
- 18. Anderson S, Payne MA. Corporal punishment in elementary education: views of Barbadian schoolchildren. *Child Abuse Negl* 1994;18:377–386.
- 19. Monyooe LA. Perspective reports of corporal punishment by pupils in Leshoto schools. *Psychol Rep* 1993;73:515–518.
- Lepen Cherian V. Self-reports of corporal punishment by Xhosa children from broken and intact families and their academic achievement. *Psychol Rep* 1994;74:867–874.
- Belsky J. Etiology of child maltreatment: a developmental-ecological analysis. Psychol Bull 1993;114:413–434.
- Kaufman J, Zigler E. Do abused children become abusive parents? Am J Orthopsychiatry 1987;57:186–192.
- 23. Widom CS. The cycle of violence. *Science* 1989;244:160–166.
- 24. Buntain-Ricklefs JJ, Kemper KJ, Bell M, Babonis T. Punishments: what predicts

- adult approval. Child Abuse Negl 1994;18:945-955.
- Vargas CNA, López SD, Pérez RP, Toro VG, Zuniga CP, Ciocca BP. El castigo físico a los niños: opinión y conducta de los adultos. Rev Med Chil 1993;121:567– 573.
- Hemenway D, Solnick S, Carter C. Childrearing violence. Child Abuse Negl 1994;18:1011–1020.
- Fry DP. The intergenerational transmission of disciplinary practices and approach to conflict. *Hum Organ* 1993;52:176–185.
- 28. Arnold E. The use of corporal punishment in child rearing in the West Indies. *Child Abuse Negl* 1982;6:141–145.
- Corral-Verdugo V, Frias-Armenta M, Romero M, Muñoz A. Validity of a scale measuring beliefs regarding the "positive" effects of punishing children: a study of Mexican mothers. Child Abuse Negl 1995;19:669–679.
- Ziegert KA. The Swedish prohibition of corporal punishment: a preliminary report. J Marriage Fam 1983;45:917–926.
- Vargas CNA, López SD, Pérez RP, Toro VG, Zuniga CP, Ciocca BP. Características del castigo físico infantil administrado por padres de tres colegios de Santiago. Rev Chil Pediatr 1993;64:333–336.
- Vargas CNA, López SD, Ciocca BP, López GC. Castigo físico infantil: opiniones de los niños de dos colegios. Rev Med Chil 1994;122:958–963.
- 33. Rausch K, Kuntson JF. The self-report of personal punitive childhood experiences and those of siblings. *Child Abuse Negl* 1991;15:29–36.
- Berger AM, Knutson JF, Mehm JG, Perkins KA. The self-report of punitive child-hood experiences of young adult and adolescents. *Child Abuse Negl* 1988;12:251–262.
- 35. Weller SC, Romney AK, Orr DP. The myth of a sub-culture of corporal punishment. *Hum Org* 1987;46:39–47.
- 36. Socolar RRS, Stein REK. Spanking infants and toddlers: maternal belief and practice. *Pediatrics* 1995;95:105–111.
- 37. Carlson BE. Children's belief about punishment. *Am J Orthopsychiatry* 1986;56:308–312.

- Wilson-Brewer R, Spivak H. Violence prevention in schools and other community settings: the pediatrician as initiator, educator, collaborator, and advocate. *Pediatrics* 1994;94(suppl):623–630.
- Wissow LS, Roter D. Toward effective discussion of discipline and corporal punishment during primary care visits: findings from studies of doctor-patient interaction. *Pediatrics* 1994;94:587–593.
- Sugg NK, Inui T. Primary care physicians' response to domestic violence. Opening Pandora's box. *JAMA* 1992;267:3157–3160.
- Morris JL, Johnson CF, Clasen M. To report or not to report. Physicians' attitudes toward discipline and child abuse. Am J Dis Child 1985;139:194–197.
- Levav I, Restrepo H, Macedo CG de. The restructuring of psychiatric care in Latin America. A new policy for mental health services. J Public Health Pol 1994;15:71–83.
- Abramson JH. The four types of evaluation: clinical reviews, clinical trials, program reviews, and program trials. *Public Health Rep* 1979;94:210–215.
- 44. Fly B. Mass media and smoking cessation: a critical review. Am J Public Health 1987;77:153–160.
- Rice RE, Paisley WJ. Public communications campaigns. Beverly Hills, CA: Sage; 1990.
- 46. Cartwright D. Some principles of mass persuasion: selected findings from research on the sale of United States war bonds. *Hum Relat* 1949;2:53–69.

- McGuire WJ. Personality and attitude change: an information processing theory. In: Greenwalt AG, Brock TC, Ostrom TM, eds. Psychological foundations of attitudes. Orlando, FL: Academic Press; 1968.
- Bandura A. Social learning theory. Englewood Cliffs, NJ: Prentice Hall; 1977.
- 49. Gelles RJ, Edfeldt AW. Violence towards children in the United States and Sweden. *Child Abuse Negl* 1986;10:501–510.
- Soumenkoff G, Marneffe C, Gerard M, Limet R, Beeckmans M, Hubinont PO. A coordinated attempt for prevention of child abuse at the antenatal care level. *Child Abuse Negl* 1982;6:87–94.
- Howard BJ. Discipline in early childhood. Pediatr Clin North Am 1991;38:1351–1369.
- Woolf A, Taylor L, Melnicoe L, Andolsek K, Dubowitz H, De Vos E, Newberger E. What residents know about child abuse. Implications of a survey of knowledge and attitudes. Am J Dis Child 1988;142:668– 672.
- 53. Olds DL, Henderson CR, Chamberlin R, Tatelbaum R. Preventing child abuse and neglect: a randomized trial of nurse home visitation. *Pediatrics* 1986;78:65–78.
- Poole SV, Ushkow MC, Nader PR, Bradford BJ, Ashbury JR, Worthington DC, Sanabria KE, Carruth T. The role of the pediatrician in abolishing corporal punishment in schools. *Pediatrics* 1991;88:162–167.