

Corporal Punishment in Schools and its Effect on Academic Success

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Good morning Chairwoman McCarthy and Members of the Committee.

Thank you for inviting me to testify on corporal punishment in schools and its effect on children. It is my distinct honor to speak with you today. I am Donald E. Greydanus, a pediatrician, and Professor of Pediatrics & Human Development at Michigan State University as well as Pediatrics Program Director at the MSU/Kalamazoo Center for Medical Studies in Kalamazoo, Michigan. In my testimony I draw on the research in this area as well as more than 35 years of my clinical and research work in caring for children and adolescents. One focus of my research and clinical work has been on violence and its effect on our children and adolescents.

Definition of Corporal Punishment

Corporal punishment refers to intentional application of **physical pain** as a method of behavior change.¹ It includes a wide variety of methods such as *hitting, slapping, spanking, punching, kicking, pinching, shaking, shoving, choking, use of various objects (i.e., wooden paddles, belts, sticks, pins, or others), painful body postures (such as placing in closed spaces), use of electric shock, use of excessive exercise drills, or prevention of urine or stool elimination.*^{2,3} The majority of children have experienced physical punishment by

the time they reach adolescence.^{2,3} Corporal punishment in schools does not refer to the occasional need of a school official to restrain a dangerous student or use physical force as a means of protecting members of the school community subject to imminent danger.

Prevalence of Corporal Punishment

The prevalence of corporal punishment of children in schools remains high in the United States. In spite of many education and other national groups calling for corporal punishment in schools to be banned, the United States remains one of the few industrialized countries allowing corporal punishment in 30 states.^{2,21} According to the Office of Civil Rights (2007), school officials, including teachers, administered corporal punishment to **223,190 school children** across the nation during the 2006-2007 school year.^{8,12} Experts note that there are about 1.5 million *reported* cases of physical punishment in school each year, but calculate the actual number to be *at least 2-3 million*; as a result of such punishment, **10,000-20,000 students** request subsequent medical treatment each year.^{8,9,12} During this same period, the top ten states for students being hit were, in order of highest to lowest frequency: Mississippi, Arkansas, Alabama, Oklahoma, Louisiana, Tennessee, Oklahoma, Texas, Georgia, Missouri, and Florida.^{9,11,20,21}

Current studies indicate that physical punishment is more common in kindergarten through eighth grade (versus high school), in rural schools (versus urban), in boys (versus girls), and in disadvantaged as well as non-Caucasian children (versus middle-class and upper-class Caucasians).^{2,3,8,18-21} The lowest

incidence tends to be in those states and school districts that have outlawed corporal punishment.^{2,3,4,9,18-21}

Youth who attend rural southern schools and who are male or who are African-American are more likely to be victims of corporal punishment.^{3,8} In fact, according to data from the US Department of Education's Office of Civil Rights, African American students comprise 17% of all public school students in the U.S., but are 36% of those who are victims of corporal punishment; this is more than twice the rate of white students. Looking at data from only the 13 states that paddle more than 1,000 per year, African-American students make up 24.8 percent of the student population but 35.9 percent of those paddled. Additionally, almost 40% of all the cases of corporal punishment occur in just two states: Texas and Mississippi; also, if one adds Arkansas, Alabama, and Georgia, these five states account for almost three quarters of all the children receiving corporal punishment in schools.^{3,8}

Disciplinary Ineffectiveness of Corporal Punishment

Advocates of corporal punishment in schools generally contend that it is an *effective* form of correcting child misbehavior.² *However, a review of the science in this area notes that the **vast majority** of the evidence leads to the conclusion that corporal punishment is an **ineffective** method of discipline and has major deleterious effects on the physical and mental health of those on whom it is inflicted.*^{1,2,4,19,20,21} As noted already, the Office of Civil Rights (2007) reports that 223,190 school children in the United States received corporal punishment during the 2006-2007 school year with estimates that include up to 3

million children and 10,000 to 20,000 requesting medical treatment.^{8,12} Indeed, children and adolescents can be physically damaged by such punishment. In the case of corporal punishment in schools, many students are hurt. Medical complications may prevent students from returning to school for days, weeks, or even longer. Reported medical findings include abrasions, severe muscle injury, extensive hematomas, whiplash damage, life-threatening fat hemorrhage, and others (including death!).^{8,9,12,21}

There is no clear evidence that such punishment leads to better control in the classroom.^{2,10,11,13,19,21,22} Physically punishing children has *never* been shown to enhance moral character development, increase the student's respect for teachers or other authority figures in general, or offer greater security for the teacher.^{2,6,8,19,21} Children who are subjected to corporal punishment in school, in my view, are being physically, emotionally, and mentally abused; indeed, there are no data demonstrating that students subjected to corporal punishment in schools develop enhanced social or self-control skills.^{2,4,7,21}

Effect of Corporal Punishment in School on Academic Success

Hyman et. al.^{4,6,21} persistently assert that approximately one-half of students who are subjected to severe punishment develop an illness called *Educationally Induced Post-Traumatic Stress Disorder (EIPSD)*. In this disorder, there is symptomatology analogous to the Post-Traumatic Stress Disorder (PTSD). As with PTSD, EIPSD can be identified by a varying combination of symptoms characteristic of depression and anxiety. This mental health imbalance is induced by significant stress; with EIPSD the stress is the inflicted punishment.

Such victimized students can have difficulty sleeping, fatigue, feelings of sadness and worthlessness, suicidal thoughts, anxiety episodes, increased anger with feelings of resentment and outbursts of aggression, deteriorating peer relationships, difficulty with concentration, **lowered school achievement**, antisocial behavior, intense dislike of authority, somatic complaints, **tendency for school avoidance, school drop-out**, and other evidence of negative high-risk adolescent behavior.^{22,23} This does not predict nor encourage academic success in our school milieu.

This work is consistent with other research concluding that punished children become more rebellious and are more likely to demonstrate vindictive behavior, seeking retribution against school officials and others in society.⁹ Punishment is based on aversive techniques and produces very limited results.^{21,22} A student may cease acting out in one class only to continue in others. Such a child or adolescent learns the wrong message, one of avoidance or escape from getting caught or negative ways of eluding detection for wrongdoing.²⁴ This student very likely will learn techniques that actually lead to reduced self-control, with negative behavior characterized by more acting out, **school absence, malingering, recidivism, and overt academic revocation.**^{4,9,12,21} Some research notes that the more corporal punishment is used in schools, the higher is the rate of student violence and homicide.²⁵

Research notes that corporal punishment constructs an environment of education that can be described as *unproductive, nullifying, and punitive*. Children become **victims**, and trepidation is introduced to all in such a

classroom. There is a limited (if any) sense of confidence and security; even those children who witness this type of abuse are robbed of their full learning potential.^{19,21-24,26} Students who are *witnesses or victims* of such abuse can develop low self-esteem, magnified guilt feelings, and various anxiety symptoms; such results can have baneful results in the psychosocial and educational development of these students.^{19,21-26} When studies look at the milieu of these classrooms, one finds that all are subjected to less, not more, learning. Because of fear, the nurturing of open communication, so vital to effective education, is severely spoiled in such aversive settings.

However, the use of corporal punishment is associated with increased mental health problems in children including increased psychological distress, which may lead to anxiety, depression, alcohol and drug use, and general psychological maladjustment in those to whom it is applied.² Also, in addition to personal distress, it may lead to vicarious learning of maladaptive methods of problem resolution by those students who witness it.

The use of corporal punishment sanctions the notion that it is meritorious to be violent toward children, thereby devaluing them in society's eyes.^{2,11,19,21} It encourages children to resort to violence because they see their authority figures using it. Such practices harm children in teaching them that violence is acceptable, especially against the weak, the defenseless, and the subordinate; this is a message that can be reasonably assumed will negatively affect generations yet unborn. Violence is not acceptable and we must not support it by sanctioning its use by educational authority figures.^{2,19}

Alternatives to Corporal Punishment

An important technique in maintaining classroom control is to develop a milieu of **effective** communication and **positive** reciprocal relationships between parents, students, and teachers.²¹ School officials should possess a) expertise in child and adolescent development, b) generally enjoy working with children in the academic setting, c) have a strong desire to help youth learn, and d) promote an environment that clearly demonstrates that students are valued, respected, and understood. The emphasis should be on positive educational exchanges between teachers and students, not futile, contentious, win-lose contests.^{2,6,8,21}

Students, as well as their parents, should be carefully involved in decision-making about school issues affecting them, including the development and implementation of educational goals and disciplinary rules, along with positive behavioral support where required. Schools should have peer support programs that utilize techniques to encourage acceptable behavior.²

It is critical that teachers receive adequate training and resources to help them effectively maintain classroom control without resorting to violent or aggressive techniques.² One way to accomplish this is to provide teachers, both during pre-service and in-service training, with the ability to employ behavior management techniques that promote pro-social classroom interactions among the students; this would also promote a positive learning environment for those students. Teachers who comprehend the deleterious short- and long-term consequences of corporal punishment may be motivated to make appropriate changes to their classroom management skills. Schools should have an ample

supply of counselors in the school to help teachers provide their problem students with access to another caring adult who can promote self-management as well as anger and impulse control especially for younger children.^{2,21,26}

Constitutional Challenges

Though more than half the states prohibit the use of corporal punishment in schools, federal law does not ban the practice. In the landmark case of Ingraham v. Wright,^{11,14} (1977) the US Supreme Court refused to impose constitutional restrictions on the practice of “reasonable” corporal punishment. The court held that corporal punishment in schools does not violate Eight Amendment rights against cruel and unusual punishment or Fourteenth Amendment rights to due process. In a subsequent case, Hall v. Tawney (1980) the Fourth Circuit Court of Appeals held that students “have a right to be free from state intrusions into the realm of personal privacy and bodily security thorough means so brutal, demeaning and harmful as literally to shock the conscience of the court.” Some state laws criminalize the imposition of excessive corporal punishment, but the standard of “excessiveness” is hard for students to prove. Generally speaking, it would be easier to prove a criminal case of assault and battery than to prove that a teacher has violated a student’s substantive due process rights in a particular school disciplinary action. Thus, attempts to expand students’ common law rights by invoking the U.S. Constitution have been met with limited, and generally, **unsatisfactory** results.^{9,18}

Aside from the limited success to end corporal punishment through the courts and under the U.S. Constitution, 30 states have banned corporal

punishment in public and private schools through their own legislative process. By comparison, 47 states have laws banning corporal punishment in family day care settings, 44 states in group homes, 48 states in day care centers, and 49 states in home foster care (www.stophitting.com).

CONCLUSIONS

The use of corporal punishment in the school environment falsely and perfidiously reinforces physical aggression as an acceptable and effective means of eliminating unwanted behavior in our society. Corporal punishment in schools is an *ineffective, dangerous, and unacceptable* method of discipline. **Nonviolent** methods of classroom control should be utilized in **all** our school systems.^{2,8,9,19,20,21} As a father of 4 daughters, a grandfather of 5 grandchildren, a Professor of Pediatrics, a medical scientist, and as a US Navy Vietnam veteran who served in the Vietnam war, I urge the committee to examine the science of this issue and understand that:

- There is no clear evidence that such punishment leads to improved control in the classroom.
- Corporal punishment has major deleterious effects on the physical and mental health of students punished in this manner.
- It severely reduces and does not enhance the academic success of students who are subjected to corporal punishment in schools.
- The use of corporal punishment in schools reinforces physical aggression and promotes violence in society.
- Corporal punishment in schools should be banned.

- Teachers should be educated in the use of alternative methods of discipline, with an emphasis on employing evidence-based behavior modification and other techniques to maintain control of the classroom without resorting to violence.

Our precious children should not be subjected in the school milieu to *hitting, slapping, spanking, punching, kicking, pinching, shaking, shoving, choking, use of various objects (wooden paddles, belts, sticks, pins, or others), painful body postures (as placing in closed spaces), use of electric shock, use of excessive exercise drills, or prevention of urine or stool elimination.* In closing, I wish to avail myself to you should you have specific questions for me in this regard. I thank you very much for the opportunity and honor to speak before you today.

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References

- [1] Straus MA, Mouradian VE: Impulsive corporal punishment by mothers and antisocial behavior and impulsiveness of children. *Behav Sci Law* 1998; 16:353-374.
- [2] Gershoff ET, Bitensky, SH: The case against corporal punishment of children: Converging evidence from social science research and international human rights law and implications for U.S. public policy. *Psychology, Public Policy and Law*. Nov 2007; 13(4): 231-272.
- [3] McClure TE, May DC: Dealing with Misbehavior at Schools in Kentucky: Theoretical and contextual predictors of use of corporal punishment. *Youth & Society* Mar 2008; 39(3): 406-429.
- [4] Hyman IA: Using research to change public policy: Reflections on 20 years of effort to eliminate corporal punishment in schools. *Pediatrics* 1996; 98 (Suppl):818-821.
- [5] Bauman LJ, Friedman SB: Corporal punishment. *Pediatric Clin No Amer* 1998; 45:403-414.
- [6] Hyman IA, McDowell E, Rains B: Corporal punishment and alternatives in the schools: An overview of theoretical and practical issues in National Institute of Education: Proceedings: Conference on Corporal Punishment Schools: A National Debate, February 18-20, 1977, U.S. Government Printing Office, 729 222/565, 1977.
- [7] Herman DM: A statutory proposal to prohibit the infliction of violence upon children. *Family Law Quarterly* 1985; 19:1-52.
- [8] Office for Civil Rights: 2006 civil rights data collection: Projected values for the nation. Washington, DC: U.S. Department of Education. 2007. Retrieved January 16, 2009, from <http://ocrdata.ed.gov/ocr2006rv30/xls/2006Projected.html>
- [9] Poole, SR, Ushokow, MC, Nader PR, et al.: The role of the pediatrician in abolishing corporal punishment in schools. *Pediatrics* 1991; 88:162-7.
- [10] Moelis CS: Banning corporal punishment: A crucial step toward preventing child abuse. *Child Legal Rights* 1988; 9:2-5.
- [11] Frazier HC: Corporal and capital punishment of juveniles. *Med Law* 1990; 9:996-1004.

- [12] Center for Effective Discipline: Discipline at School (**NCACPS: U.S.: Corporal Punishment and Paddling Statistics by State and Race - 2006-2007 School Year.** Columbus, Ohio: Author; March, 2008. Retrieved on 1/16/09 from <http://www.stophitting.com/index.php?page=statesbanning>)
- [13] Goss v. Lopez, 419 U.S. 565 (1975).
- [14] Ingraham v. Wright, 430 U.S. 651, 662 (1977).
- [15] Hall v. Tawney, 621 F. 2d 607, 613 (4th Cir. 1980).
- [16] Garcia v. Miera, 817 F. 2d. 650, 653 (10th Cir. 1987).
- [17] Wise v. Pea Ridge School District, 855 F. 2d. 560 (8th Cir.1988).
- [18] Neal ex rel. Neal v Fulton County Bd. of Educ., 229 F.3d 1069 (11th Cir, 2000), rehearing denied 244 F.3d 143.
- [19] Lynnette R: Corporal punishment in American public schools and the Rights of the Child. J Law & Education 2001; 30:554-563.
- [20] American Academy of Pediatrics Committee on School Health: Corporal punishment in schools. Position Statement. Pediatrics 2000;106:343.
- [21] Greydanus DE, Pratt HD, Spates CR, Blake-Dreher AE, Greydanus-Gearhart MA, Patel DR: Corporal punishment: Position Statement of Society for Adolescent Medicine. J Adolesc Health 32:385-393, 2003.
22. Dubanoski RA, Inaba M, Gerkewicz BA: Corporal punishment in schools: Myths, problems, and alternatives. Child Abuse Negl 1983; 7:271-8.
23. Reinholz LK: A practical defense of corporal punishment in the schools, in National Institute of Education: Proceedings: Conference on Corporal Punishment in Schools: A National Debate, February 18-20, 1977, U.S. Government Printing Office, 729 222/565,1977.
24. Mallot RW, Malott ME, Trojan EA: Elementary Principles of Behavior. 4th Edition. Upper Saddle River, NJ: Prentice Hall, 2000.
25. Strauss MA: Spanking and the making of a violent society. Pediatrics 1996; 98 (Suppl): 837-841.
26. Pratt HD, Greydanus DE: Adolescent violence: Concepts for a new millennium. Adolesc Med 2000; 11:103-125.

Additional Bibliography

- 1986-1987 Elementary and Secondary Civil Rights Survey, National Summary of Projected Data. Washington, DC: Office of Civil Rights, U.S. Department of Education, 1987.
- 1990 *Elementary Secondary School Civil Rights Survey, National State Summary of Projected Data.* Washington, DC: Office of Civil Rights, US Department of Education, 1992.
- Abrahams N, Casey K, Daro D: Teachers' knowledge, attitudes and beliefs about child abuse and its prevention. Child Abuse Negl 1992; 16:229-238.
- American Academy of Pediatrics. Committee on School Health, American Academy of Pediatrics. Corporal punishment in schools. Position paper. Pediatrics 1986; 73:258.
- American Academy of Pediatrics. Committee on School Health, American Academy of Pediatrics. Corporal punishment in schools. Position Paper. Pediatrics 1991; 88:173.
- American Academy of Pediatrics Committee on Psychosocial Aspects of Child and Family Health. Guidance for effective discipline. Pediatrics

- 1998; 101:723-728.
- American Academy of Pediatrics Committee on School Health:
Corporal punishment in schools. Position Statement. *Pediatrics* 2000;
106:343.
- Bauer GB, Dubanoski R, Yamanchi LA, et al.: Corporal punishment
and the schools. *Educ Urban Soc* 1991; 22:285-99.
- Block N, Fathman R: Convincing state legislatures to ban corporal
punishment. *Children's Legal Rights J* 1988; 9:21-24.
- Bongiovani AF: A review of research on the effects of punishment:
Implications for corporal punishment in schools, in National Institute
Of Education: Proceedings: Conference on Corporal Punishment in Schools: A
National Debate, February 18-20, 1977, U.S. Government Printing Office, 779
222/565, 1977.
- Brown WE, Payne T: Policies/practices in public school disciplines.
Academic Therapy. 1988; 23:297-301.
- Buntain-Ricklefs JJ, Kemper KJ, Bell M et al: Punishments: What
predicts adult approval? *Child Abuse Negl* 18: 945, 1994.
- Cameron J, Pierce WD: Reinforcement, reward, and intrinsic
motivation: A meta-analysis. *Reviews of Educational Research*
1993; 64:363.
- Carkhuff RR, Berenson PH, Pierce RM: *The Skills of Teaching:
Interpersonal Skills*. Amhurst, MA: Human Resource Development Press,
1973.
- Climinillo LM.: Discipline: The school's dilemma. *Adolescence*
1980; 15:1-12.
- Cohen P: How can generative theories of the effects of punishment
be tested? *Pediatrics* 1996; 98(Suppl):834-36.
- Coie JD, Underwood M, Lochman JE: "Programmatic intervention
with aggressive children in the school setting." In: Pepler DJ &
Rubin KH (eds): *The Development and Treatment of Childhood
Aggression*. Hillsdale, NJ: Lawrence Erlbaum Associates Inc, pp.
389-410, 1991.
- Conte AE: In loco parentis: Alive and well. *Education* 2000; 121:195-200.
- Eron LD: Research and public policy. *Pediatrics* 1996; 98 (Suppl):821-
823.
- Gainer PS, Webster SW, Champion HR: A youth violence prevention
program: Description and preliminary evaluation. *Arch Surg*
1993; 128:303-8.
- Garrison EG: Psychological maltreatment of children: An emerging
focus for inquiry and concern; *American Psychologist* 1987; 42:157-9.
- Gershoff ET: Corporal punishment by parents and associated child behaviors and
experiences: A meta-analytic and theoretical review. *Psychol Bull* 2002; 128:539-
579.
- Giles-Sims J, Straus M & Sugarman D: Child, maternal and family
characteristics associated with spanking. *Fam Relations* 1995; 44:170-
176.
- Graziano AM: Why we should study sub-abusive violence against
children. *J Interpersonal Violence* 1994; 9:412.
- Grossman DC, Rauh MJ, Rivara FP: Prevalence of corporal punishment
among students in Washington State schools. *Arch Pediatr Adolesc Med*

- 1995; 149:529-532.
- Grusec JE, Goodnow JJ: Impact of parental discipline methods on the child's internalization of values: A reconceptualization of current points of view. *Develop Psychol* 1994; 30:4-19.
- Hart SN, Brassard MR: A major threat to children's mental health: Psychological maltreatment. *American Psychologist* 1987; 42:160-5.
- Holden GW, Coleman SM, Schmidt KL: Why 3-year-old children get spanked: Parent and child determinants as reported by college-educated mothers. *Merrill-Palmer Quarterly* 1995; 41:431.
- Hyman IA, Irwin A, Lally D: discipline in the 1980's: Some alternatives to corporal punishment. *Children Today* 1982; 11:10-13.
- Hyman IA.: Eliminating corporal punishment in schools: Moving from Advocacy research to policy implementation. *Child Legal Rights* 1988; 9:14-20.
- Hyman IA, Zelikoff W, Clarke J: Psychological and physical abuse in the schools: A paradigm for understanding posttraumatic stress disorder in children and youth. *J Traumatic Stress* 1988; 1:243-66.
- Hyman IA: Corporal punishment, psychological maltreatment, violence, and punitiveness in America: research, advocacy, and public policy. *Applied Preventive Psychology* 1995; 4: 113-130.
- Hyman I, Dahbany A, Blum M et al.: *School Discipline and School Violence: The Teacher Variance Approach* Needham Heights, MA: Allyn & Bacon, 1996.
- Imbrogno AR: Corporal punishment in America's public schools and the U.N. Convention of the Child: A case for nonratification. *J Law & Education* 2000; 29: 125-147.
- Jones VF, Jones LS: *Responsible Classroom Discipline: Creating Positive Learning Environments and Solving Problems*. Boston, Allyn and Bacon, 1981.
- Larzelere R: A review of the outcomes of parental use of nonabusive or customary physical punishment. *Pediatrics* 1996; 98 (Suppl): 824-828.
- Larzelere RE, Johnson B: Evaluations of the effects of Sweden's spanking ban on physical child abuses: A literature review. *Psychological Rep* 1999; 85:381-92.
- Lewis C: The roots of discipline in Japanese preschools: Meeting children's needs for friendship and contribution. *Advances in Early Education and Day Care* 1995; 6:269-278.
- McCord J: Unintended consequences of punishment. *Pediatrics* 98 (Suppl): 1996; 832-836.
- McCormick KF: Attitudes of primary care physicians toward corporal punishment. *JAMA* 1992; 267:3161.
- Medway FJ, Smircic JM: Willingness to use corporal punishment among school administrators in South Carolina. *Psychol Rep* 1992; 71:65-66.
- Olson DA. : The Swedish ban of corporal punishment. *Brigham Young University. Law Review* 1984; 447-456.
- Orentlicher D: Corporal punishment in the schools. *JAMA* 1992; 267:3205-3208.
- Paintal S: Banning corporal punishment of children. *Childhood Education* 1999; 76:36-39.

- Patterson GR: The aggressive child: Victim and architect of a coercive system. In: Marsh EJ, Hamerlynck LH, Handy LC, eds. Behavior Modification and Families. New York: Brunner/Mazel, 267-316, 1976.
- Patterson GR, DeBaryshe BD, Ramsey E: A developmental perspective on antisocial behavior. *Am Psychol* 1989; 44:329.
- Reitman A.: Corporal punishment in schools-The Ultimate violence. *Child Legal Rights* 1988; 9:6-13.
- Rivara FP, Farrington DP: Prevention of violence: Role of the pediatrician. *Arch Pediatr Adolesc Med* 1995; 149:421-4.
- Roberts MW, Powers SW: Adjusting chair timeout enforcement procedures for oppositional children. *Behav Ther* 1990; 21:257.
- Smith JR, Brooks-Gunn J: Correlates and consequences of harsh discipline for young children. *Arch Pediatr Adolesc Med* 1997; 151:777-786.
- Straus MA, Sugarman DB, Giles-Sims J: Spanking by parents and subsequent antisocial behavior of children. *Arch Pediatr Adolesc Med* 1997; 75:761-67.
- Sulzer-Azaroff B, Mayer GR: *Applying Behavior Analysis Procedures with Children and Youth*. New York, Holt, Rinehard, and Winston, 1977.
- Sulzer-Azaroff B, Mayer GR: *Achieving Educational Excellence*. New York, Holt, Rinehard, and Winston, 1986.
- The National Center for the Study of Corporal Punishment and Alternatives. *States Which Have Abolished Corporal Punishment as a Means of Discipline in the Schools*. Philadelphia, PA: Temple University, 1994.
- Thompson EE: The short- and long-term effects of corporal punishment on children: A meta-analytic review. *Psychol Bull*, 1999.
- Thrasher v. General Casualty, 732 Supp 996, W.D. Wis (1990).
- Wauchope BA & Straus MA: Physical punishment and physical abuse of American children: Incidence rates by age, gender and occupational class." In: MA Straus & RJ Gelles (eds): *Physical violence in American families*. New Brunswick, NJ: Transaction, pp. 133-148, 1990.
- Weiss B, Dodge KA, Bates JE et al.: Some consequences of early harsh discipline: Child aggression and maladaptive social information processing style. *Child Dev* 1992; 63:1321.
- Wilson FC: A look at corporal punishment and some implications of its use. *Child Abuse Negl* 1982; 6:155-64.
- Wolfgang CH, Glickman CD: *Solving Disciplinary Problems: Strategies for Classroom Teachers*. Boston, Allyn and Bacon, 1980.