

THE SCHOOL OF MEDICINE
OF
THE UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL



THE MERRIMON LECTURE

by

M. JOYCELYN ELDERS, M.D.

October Thirtieth, Nineteen Hundred and Ninety

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**ADOLESCENT HEALTH ISSUES:
WHAT IS OUR ROLE?**

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1990

THE MERRIMON LECTURESHIP IN MEDICINE

This Lectureship, which was established by the late Dr. Louise Merrimon Perry, was inaugurated in 1966. Dr. Perry's idea was that the lectures be open to all, but that they be concerned with "the Origins, Traditions and History of the Medical Profession and of that Ethical Philosophy which must dominate this Field of Human Endeavor." It was her intention that the Merrimon Lecturers be distinguished both for scientific or clinical skills and a notably humane attitude toward Medicine.

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M. JOYCELYN ELDERS, M.D.

The remarkable accomplishments that are documented in the curriculum vitae of **Dr. Joycelyn Elders** come as no surprise to those who know her well. She is a person with infectious enthusiasm, boundless energy, and an upbeat approach to life. What might seem impossible to others are to her merely challenges to be overcome. She was born in 1933 in rural Schaal, Arkansas, to parents who had purchased their farm during the depression for \$1.00/acre (or for a raccoon skin/acre). Dr. Elders credits her grandmother for encouraging her to attend Philander Smith College, even though her family could barely afford the bus fare to Little Rock. While at Philander Smith she fell in love with science and, impossible as that dream might have seemed, resolved to become a physician. She joined the army in 1953 and became a physical therapist so that she might be eligible for the G.I. Bill. In 1956 she was one of three blacks accepted into the freshman class of medical students at the recently (and reluctantly) desegregated University of Arkansas.

The subsequent professional achievements of Dr. Elders have been numerous. Her performance as a medical student won for her one of the prestigious pediatric internships at the University of Minnesota. On returning to Little Rock her talents led to the chief residency in pediatrics. Then, resisting lucrative practice opportunities, she indulged her love of science by accepting a fellowship in biochemistry. In 1967, she was awarded a masters degree in biochemistry based on studies of cartilage proteoglycans.

Returning to the department of pediatrics as a member of the endocrine division, Dr. Elders soon achieved an outstanding record of productivity now evident in 138 publications. Her interests span metabolic and endocrine topics that have ranged from the effects of lathyrism in the developing chick embryo to the mechanisms by which glucocorticoids cause growth retardation. Her studies of the causes of extreme insulin resistance in leprechaunism are a classical example of a successful merger of clinical medicine with laboratory research.

This short summary of her career leaves unmentioned the major reason why Dr. Elders has been invited to join the roster of giants who have been past Merimon lecturers. In 1987, she left her successful academic career to become Director of the Arkansas Department of Health. She quickly made her agenda clear by defining the epidemic of teenage pregnancies as one of the greatest public health problems of our time. Her ability to overcome apparently insurmountable obstacles in attacking this problem has won for Dr. Elders national acclaim among professional health workers and has been immensely important in decelerating the frequency of unwanted teenage pregnancies.

Dr. Elders's accomplishments have been widely recognized. She was elected to AOA, served as president of the Southern Society for Pediatric Research, and as an officer of the Lawson Wilkins Pediatrics Endocrine Society. She has been a member of the Human Embryology and Development Study Section of the National Institutes of Health and of the Maternal and Child Health Research Committee of the Health Services Agency. She is also an examiner for the American Board of Pediatrics. Her civic record is impressive, and she has served many philanthropic organizations as a board member. Dr. Elders has been recognized in *100 Outstanding Women in Arkansas*, *Personalities of the South*, and *Distinguished Women in America*. Her success has caught the attention of The New York Times and she was

recently featured on the CBS news program “60 Minutes.” She is married to Oliver Elders, a highly successful basketball coach, and they have reared two sons, both of whom are pursuing professional careers.

Dr. Louise Merrimon Perry intended that the Merrimon lecturers “be distinguished for both scientific or clinical skills and a notably humane attitude toward Medicine.” The 1990 Lecturer fits these prescriptions like the hand fits a glove.

ADOLESCENT HEALTH ISSUES: WHAT IS OUR ROLE?

Introduction

Please let me start by acknowledging the honor of this lectureship. Looking at the list of my distinguished predecessors, I was amazed that those responsible for selecting the lecturers would choose a health officer from a small, little-known state west of the Mississippi. Regardless of my surprise, I was very pleased to accept and to enjoy the marvelous reception you are giving me this week. It is a pleasure and inspiration to meet so many concerned people and engage so many stimulating minds.

I hope your invitation to me reflects your appreciation of the importance of the problems facing our children as we prepare to enter the 21st century. This is a realization that struck me forcefully three years ago when I became Director of the Arkansas Department of Health. I have been working to do something about it ever since. I have talked in nearly every county of my state about it, and I have spoken in many parts of the nation. I have challenged our Governor (my boss) and complained to our legislators (who pay my salary). Our agency, which spends about one-half of its budget on maternal and child health concerns, has vigorously enhanced its existing programs and introduced new ones. Yet, the problem cannot be solved in the public health arena alone, for its causes go well beyond biology and pediatrics.

Tonight, I would like to share some of my thoughts about the factors that contribute to the health of our children and to enlist your commitment to some imaginative solutions I have been promoting. I shall review some of the problems, suggest strategies for change, and, I hope, have each of us reflect on our vision for this country as it prepares to enter the 21st century.

Background and Needs

Today there are 70 million children in this country under 20 years of age. They represent the most valuable resource we have. They are our future. Yet the facts about children in the United States are not encouraging. Too many grow up poor, ignorant, and enslaved. Too many grow up in fragmented families or receive inadequate parenting, health care, education, motivation and hope.

The present status of our children is an affront to democratic ideals, especially to the notion that all children should have an equal chance to become fully productive and valued citizens. We are risking the future of our society as we know it because of our failure to invest in the next generation.

Unlike most other age groups, our children's death rates have not continued to decline during the 1980s. Among black infants, white children 1- to 4-years old, and black adolescents and young adults (15- to 24-years old), death rates actually increased from 1985 to 1987. Deaths due to suicide and homicide have increased

during the 1980s for children, adolescents and young adults.¹⁶ Injuries, particularly due to violence, has replaced communicable diseases as the primary cause of death among adolescents.⁴

Since 1976, immunization coverage has deteriorated rather than improved in the U.S. In 1985, 61% of children 1- to 4-years old were vaccinated for measles, down from 66% in 1976. Similar declines were observed for rubella (59 vs 62%), DTP (65 vs 71%), and polio (55 vs 62%). Only mumps vaccinations increased (59 vs 48%).¹⁶

Nationally, obesity has been increasing over the past two decades among children 6- to 17-years-old. Increases have been greater among black than among white children.⁹

In 1981, the Select Panel for the Promotion of Child Health reported that 14% of children and adolescents did not receive needed medical care, and 12% had no regular source of care.⁸ In 1981, 18% of children 10 to 18 years old were not covered by health insurance; by 1986, the proportion of uninsured had risen to 21%. This rise parallels an increasing proportion of adolescents in poor households—the poorer the household, the less likely its children had any health insurance. In families whose incomes were less than 50% of poverty, 40% of adolescents were uninsured, while in families with incomes of 300% or more of poverty, less than 10% were uninsured. However, in every income bracket there was a consistent increase in uninsured adolescents from 1981 to 1986.²⁸

Children and Poverty

Most Americans see children as innocent victims deserving of health, education, motivation, and hope. Moreover, as concern has mounted about the future competitiveness and productivity of our economy, the importance of investing in the next generation has come to be viewed not just as an act of compassion, but as an economic necessity.

Yet there is little evidence of investment in children's programs. The federal budget has increased by over 150% in the past ten years. Spending on children's programs has only increased 15%. Over the last ten years, the only area in the federal budget to grow substantially was military spending—by almost 50%. We don't need to spend money to send our kids overseas to die. They are slowly dying here at home. However, we can't blame the government, because we are the government. It is time for us to become power brokers for the powerless, the children.

Since 1980, children have become the poorest age group in American society, partly because of the growth of single parent families and partly because real incomes have stagnated.²¹ Ten years, ago, one in five were poor. Today, it is one in four. And if the rate of child poverty continues as it has for the past twenty years, 40% of the children in this country will be poor by the year 2030. We must change our ideas about who our poor children are: They are no longer defined along racial or regional lines: 42 percent of the five million poor children under six are white. You can still find about two out of five poor children in this country living in the south. But it is other regions that are seeing the most rapid growth.¹⁵

As we change our thinking about children in poverty, we must also begin to speak out in their behalf. We have been silent too long. We have let society brand too many children as the permanent underclass. It is time to recognize these children not as the underclass, but rather as the disadvantaged. They are "youth-at-risk" (Table I).

TABLE I. YOUTH AT RISK

Five million children under six live in poverty in the United States.

If the rate of child poverty continues as it has for the past 20 years, 40% of the children in this country will be living in poverty by the year 2030.

Infant mortality has dropped since 1970 but progress slowed during the 1980's leaving the United States behind 19 other industrialized nations in its infant mortality rate.

Unlike other age groups, child death rates have not continued to decline. In fact, among black infants, white children one to four years old, and black adolescents and young adults, the rates actually increased.

At the beginning of the decade, one in four children or adolescents were receiving infrequent medical care or no care at all. Since then, the proportion of uninsured children has risen steadily.

More than a half million 12- to 17-year olds admitted in 1988 to using cocaine. Half of that population said they had tried alcohol and two-thirds had consumed alcohol within the past 30 days.

More than 40% of that same age group had smoked cigarettes. Adolescents who smoke are three times more likely to consume alcohol, eight times more likely to smoke marijuana, and 20 times more likely to use cocaine.

Each year in the United States, more than one million young women less than 20 become pregnant. If current rates continue, one in ten will give birth by the time they turn 18.

Adolescents between the ages of 13 and 19 are showing some of the greatest increases in the number of reported AIDS cases. More than 2.5 million adolescents contract a sexually transmitted disease each year.

Only twenty-seven percent of 3- and 4-year olds from families with incomes less than \$10,000 are enrolled in pre-kindergarten programs.

Pregnancy is the most prominent reason for girls leaving school. Unmarried teen mothers are half as likely to graduate from high school as other girls. Their children are more likely to fail in school and become dependent on public assistance.

Violence and injuries account for three out of four deaths among our young people.

Their poverty puts them at greater risk for abuse. In a survey of documented cases in 1986, children living in families with annual incomes below \$15,000 were about seven times more likely to suffer emotional, physical, or sexual abuse as were children from higher-income families. Their poverty puts them at greater risk for the results of poor nutrition. They are more likely to exhibit signs associated with poor nutrition such as growth retardation, anemia, and poor school performance.¹⁵

Adolescence and Drugs

It is also time to change our approach to the drug problems of our youth. More than a half-million 12- to 17-year-olds admitted to using cocaine in 1988; 50% of that group had tried alcohol, and 66% of them had consumed alcohol within the past 30 days. Forty-two percent of those children have smoked cigarettes, and eleven percent of them were smoking at least 10 cigarettes a day. We know that tobacco is a deadly substance, but we have also learned that it can be a gateway drug—one that increases the chances for use of other harmful substances. Adolescents who smoked were found to be three times more likely to consume alcohol, eight times more likely to smoke marijuana, and twenty times more likely to use cocaine.⁸

Most importantly, we know that education can significantly reduce the rate of tobacco use among our adolescents. Instead of insisting on comprehensive education, we allow the right-wing to restrict our education efforts because we might talk about sex. In some places, the tobacco interests intimidate our efforts. We are allowing both to use the backs of children as a soapbox.

Teenage Sexuality

While some people are moralizing about what we teach our children in school, our children are proving they already know a great deal about sex. They know enough to give this country the highest rate of teen pregnancies and births in the industrialized world. Our children know enough about sex to assure this country the highest rate of abortions in the industrialized world. If the current rates continue, one in ten adolescent women will give birth by the time they turn 18.⁸ In your own state (NC), the percent of births to teen mothers has improved somewhat, as it has in my state.⁶ But Arkansas is still second in the nation in the number of births to teens; and as the state's health director, that is something I cannot abide.

Every year, more than 1.1 million young women in the United States less than 20 years of age become pregnant. Sadly, more than 330,000 of these young women are in the South.¹¹ Of these pregnancies, five out of six are unintended, 92 percent of those conceived premaritally and half of those conceived in marriage. Astounding as it may seem, more than 370 births to Southern girls age 10–14 were second or higher order birth.²⁵ Four out of ten of all women in the United States will have had a birth, an abortion, or a miscarriage by the age of 20.²⁷ For the young women who face the consequences of early, unplanned pregnancy, the choices are difficult and few. The impact lasts a lifetime. It has been said frequently that never has a decision made in private become so public for so long as that of teenage pregnancy.

The Southern Governors Association has focused on adolescent pregnancy and childbearing for the past several years because of (1) the high teenage pregnancy rate for the region and (2) the relationship between teenage childbearing and the

region's high infant mortality and low birthweight rates. Babies born to adolescent mothers are at greater risk of being born too small, too soon; and, consequently, they are at greater risk for death or disability.¹⁰ More than 10 percent of black teen mothers in the South give birth to low birthweight babies each year.¹⁶

The loss of educational attainment and potential wages due to early, unplanned parenthood and the exorbitant public expenditures for supporting families begun by teenagers has stimulated Southern leaders to examine the barriers to adolescent pregnancy prevention. Barriers to prevention programs include: (1) cultural values of the South, which are grounded in conservative, fundamental religion and racial discord, where sex education is feared and where family planning services for adolescents are misrepresented as abortion mills; (2) too few advocacy efforts; (3) poor community support; (4) inadequate resources; and (5) little appreciation for prevention.²³ Removing these obstacles will be difficult, but we must try for the sake of the children. We no longer have the luxury of debating whether adolescent pregnancy is a health issue, a moral issue or an economic issue.

These are children having children. If we can not respond to the emotional pain and frustration suffered by vulnerable adolescents, then perhaps we can understand the financial burden. Using only the sums of AFDC, Food Stamps and Medicaid payments as a gauge, we estimate the public cost of teenage childbearing in this country in 1989 was more than 21.55 billion dollars.² In my state, Arkansas, the cost was nearly 100 million dollars, and in your state, North Carolina, it exceeded 237 million dollars. Seventy-five babies a day are born to North Carolina teenage mothers.¹⁹

Pregnancy is the most prominent reason for girls leaving school, and most of these births are to single mothers. In 1987, 51.6% of white and 91.0% of black teen mothers were not married.¹⁶ They are half as likely to graduate from high school as other girls, and their children are more likely to fail in school and become dependent on public assistance.⁷

Though research on teen fathers is limited, studies have shown that males who father a child as a teenager are more likely to drop out of high school than those who don't. In one investigation of adolescents, more than 60% of the fathers who married the mother dropped out of high school. Forty percent of the unwed fathers did not complete their education.¹³

Children who drop out of high school are 2.5-fold more likely to be found in unemployment lines, 3.5-fold more likely to be arrested for a serious crime, and 7.5-fold more likely to be on welfare roles compared to high school graduates.⁷

For young males without college, real earnings have fallen since 1973, making it more difficult to support a family above the poverty level. During the past 20 years, the proportion of young men 18- to 24-years old who are neither in school, employed, nor in the military has doubled to 12% of white males and almost 30% of nonwhite males.⁷

Results of adolescent sexual activity is evident also in rising rates of sexually transmitted diseases, including AIDS. During the two years ending in August, 1990, the number of AIDS cases reported among U.S. children 13 to 19 years of age increased by more than 23%. The exposure category that showed one of the greatest

increases was the number of adolescents who had sex with an IV drug user. The absolute numbers are in the hundreds when we talk about AIDS in our adolescents, but with the current rate of increase, we could soon be seeing case numbers in the thousands.⁵

We are talking of millions, though, when we examine the numbers of sexually transmitted disease in our youth. According to the Centers for Disease Control, 2.5 million adolescents contract a sexually transmitted disease each year.⁸ These are the children who we refuse to admit are sexually active.

There are many other factors, as well, that should cause us concern about the well-being of this country's adolescents—the generation that we will expect to provide us care and make decisions as we grow older. We will want them to help us, not hold us hostage to their own pain and inadequacies. We must educate them to avoid risk-taking behaviors. Some of today's adolescents will not live to be adults. Among these now less than 25, 151,000 will not reach their 25th birthday. Three of every ten who die will be killed in motor vehicle collisions. Half of those fatalities will involve alcohol. One in ten adolescent deaths will be homicides; another one in ten, suicide.⁸

In 1988, a Gallup poll asked 8th and 10th graders about their feelings and whether they were satisfied with their lives. Sixty-one percent of them said they felt sad and hopeless. Almost half said they had difficulty coping with home and work, and more than a third told surveyors they had nothing to which to look forward. But the most alarming answers concerned suicide. More than a third said they had seriously thought about committing suicide—14 percent of them had attempted it.⁸ We must give our children reason to hope. We must give them reason to believe that life can be rich—that the American dream is not equal opportunity for some and hopelessness for others. It is hard to convey those messages, though, when so many of our young people cannot read or write.²³ It is hard to spread that message when, as in my state, we have more black men in prison than in college.

These are not new concerns. The problems of poverty and adolescence have been with us for decades, but we haven't solved them. We have only put a band-aid here and there and hoped it would stay on. It is now time for major surgery, and we can use the schools as our operating rooms. The answers will come in more comprehensive education—education from preschool to 12th grade.

Many have asked why, as Health Director, I have chosen to push for education. My reasons are simple. They have been embraced by a number of organizations—the National Commission on the Role of the School and the Community in Improving Adolescent Health, in its CODE BLUE report,¹⁷ the National Commission on Children, and the National Health Education Consortium. The last summed up the need for a marriage between health and education with these points: It costs \$20,000 a year to support an 18-year-old either in prison or at Stanford University. It costs \$15,000 a year to educate a child born addicted to drugs or alcohol. It costs \$9,000 per year to educate a child with ordinary special education needs. However, it only costs \$3,000 per year to educate a healthy child.¹⁸

These are concerns that will become your own for those of you who enter the health community. You will face the same dilemmas that I have seen in my 30 years

as a pediatric specialist. You will see patients whom you know you are only helping temporarily and dismissing them back into the world that delivered them to your care in the first place.

It has been easy for us to give the responsibilities to someone else, to departmentalize and compartmentalize our children's needs. That has not worked. It is time for all of us to see the need for cooperative efforts to guarantee our children equal opportunity and give them a chance for an equal outcome.

Strategies for Intervention

I have proposed six strategies—six prescriptions, if you will—that I believe will secure that equal chance for our children and an equal chance for our own future, a chance that the children of today will be bright, energetic, and healthy adults tomorrow. (Table II).

TABLE II. SUGGESTED STRATEGIES

Early Childhood Education—high quality pre-school education programs for all children that guarantee equal opportunity and improve the chances for equal outcome.

Comprehensive Health, Family Life, and/or Sex Education—educational programs from kindergarten through twelfth grade that help children make healthy choices, improve their self-esteem, and accept as much responsibility for their own lives as possible.

Parenting Education—education and support of parents, especially for young and poor parents.

Male Responsibility—instruction on obligations in pregnancy and parenthood, including a requirement of financial commitment from fathers and identification of father by social security number on infants' birth certificates.

School-based Health Services—health care, including family counseling and contraceptive services for adolescents.

College Tuition for Good Students of Poor Families—free college tuition and books at a state-supported school for students with at least a "B" average, good citizenship records, and a family income of \$20,000 or less.

1. Early Childhood Education

My prescriptions begin at the beginning of a child's life. It is time for us to make Early Childhood Education a reality for all children, but especially for those children at-risk. At the age of three, a child is half as tall as he will ever be. At age four, he knows half as much as he will ever know. Why, then, are we waiting until kindergarten or first grade to intervene academically?

The successes of Head Start and other high-quality pre-school programs have been documented and examined. They represent one of the earliest opportunities for primary prevention. Young children, especially those who begin school with the disadvantages of impoverished environments, are far more likely to succeed in elementary and secondary education when they are given early opportunities for social interaction and intellectual development.²³

The Perry Pre-school Project was one such example of a successful early childhood development program. Researchers followed two groups of black three- and four-year-old children from an impoverished neighborhood for 20 years. One group participated in at least a year of pre-school education. The other group had no early intervention. The difference in their quality of life 20 years later was significant.⁷ Eighty-four percent more of the Perry group were employed, and 81% more were attending college. Less than a third of the Perry group had serious scrapes with the law, while over half of the comparison group had been arrested. Teen pregnancy rates in the pre-school group were 50 percent less. In constant dollars (1981 dollars), the researchers estimated the early childhood development program had saved society at least \$3,000 per child in costs associated with delinquency and crime, \$5,000 in special education or remedial programs, and \$16,000 in public assistance. They concluded that the Perry children would return society's initial investment in taxes they would pay as adults from their improved employment and earnings records.³

The Perry Project is only one of many studies examining the impact of early childhood education. While there is a growing body of research documenting the benefits of these programs, we are still not offering this education to all of those who need it most.²³ Many of us were happy to see the White House increase the Headstart budget, but even with the additions, Headstart will only be available for one in five high-risk children. That varies from a low of 4% to a moderate 40% of these children who are eligible. What about the rest?

The majority of children from all income levels attend kindergarten. However, only 27% of 3- and 4-year-olds from families with incomes less than \$10,000 attend pre-kindergarten education programs, while more than 80% of the children from families who earn more than \$20,000 a year have pre-school experience.¹⁵ We need to ask ourselves if we are willing to take the risk with these children who are missing those developmental opportunities. That is what the National Center for Children in Poverty wondered as it pointed out that the expansion of Headstart and other pre-school programs was long overdue. It recommended making the programs full-day and full-year to meet the needs of employed parents.

If we do not meet their needs, these children will continue to start school three years behind their peers. They will eventually be passed from grade to grade with little comprehension of what they have been taught and a lot of frustration about their lot in life. Eventually, they may drop out of school and drop in to a behavior pattern that could lead to prison or prolonged poverty. To avoid these outcomes, we must see that every child starts kindergarten equally prepared to learn and succeed.

But these efforts cannot be half-hearted. We must concentrate on the quality of the programs we offer as well as the quantity of those we serve. It will take the cooperation of everyone concerned.²³

2. Comprehensive Health, Family Life, and/or Sex Education

My second prescription calls for Comprehensive Health Education Programs from pre-school through the 12th grade. To wait until high school, or even junior high, to teach children the things they need to know about their own bodies and their own lives is too little, too late. In Arkansas, one of our junior high schools has 28 pregnant teenagers enrolled this year. One of our high schools has 100 pregnant girls. They did not wait for us to teach them anything. They taught themselves, and the consequences will be theirs and ours.

Of course, instruction should be appropriate to the child's age and need to know. But we can not be timid either, even with the youngest child. Many times I am asked what we should be telling kindergarteners or first-graders about their bodies. I remind them of what we know about sexual abuse in this country. We know that more than 20% of American women have been exposed to some type of sexual abuse before they are 18 years old. About 10% of our young men have been sexually abused before they are 20. Often the abuse is initiated by someone they know—their mother's boyfriend, their father, their grandfather or an uncle. We also know that 84% of the girls less than 14 years of age who become pregnant were impregnated by someone in their own home. Knowing that, we should be telling all of our five-year-old children that if someone touches them inappropriately, they should tell someone else.

We should be giving those same five-year-olds the tools to develop healthy self-esteem. Self-respect will follow if we adequately blend their health and education needs. In its Code Blue report, the National Commission on the Role of the School and the Community in Improving Adolescent Health found that efforts to improve school performance that ignore students' health are ill-conceived. The same is true, it found, of health improvement efforts that ignore education.¹⁷

So we must accept that we can improve educational achievement if we improve student health. A Minnesota study found that youths with below-average grades are two to five times more likely to attempt suicide, smoke cigarettes daily, use alcohol excessively and be more sexually careless than their peers with above average scores.¹⁷ We must now teach them to avoid these behaviors. They need to know about human nutrition and physiology and the risks of substance abuse. In the same way, they need to know about human reproductive biology and development and the risks of early and unprotected sexual activity. We can no longer ignore or deny that our children need this information. If we do not give it to them in an appropriate educational environment, someone else will, and the delivery of that information may be anything but appropriate.

Too many of our children are learning their lessons from siblings or friends or music videos or television. We need to help them sort out and evaluate those messages. A recent conference on Television and Teens found the need to provide the adolescent with the skills to analyze and critique what is being viewed on television.⁴ A comprehensive health education course could provide those skills, not only for viewing television, but also for viewing life.

We need to give our children the power to live well and happily, and that means giving them the responsibility for as much of their lives as they are capable. They need to know the consequences of their choices and the alternatives they have not

addressed. They need to know that they can make decisions that lead them to a more hopeful and meaningful life. We need to build the bridge that leads them to that knowledge. We must stop allowing barriers such as (1) opposition from vocal, superstitious, non-Christian zealots; (2) lack of comprehensive curriculum, and (3) inadequate teacher support to keep us from implementing programs to save our children.

3. Parenting Education

My third prescription again focuses on education—Parental Education. Parents play the most significant role in guiding the course of their children's lives. Individuals are not born knowing the skills for effective parenting, yet parents mold the value system of their children. Their value system frames the way in which the children will view the world. We have already examined the teen pregnancy problems in this country. We know that we have too many children becoming parents before they become adults. Teenagers have not experienced enough of life to make healthy choices for themselves, much less for newborns.

Parents need more support in nurturing and teaching their children. Many of our social problems are worsened by parents' uninformed attitudes on health and inappropriate behavior toward their children. We must stop assuming that all parents have all the knowledge necessary to pass on to their children.

A recent survey of knowledge about sexual behavior found room for improvements among U.S. adults. Nearly half (49%) of the respondents did not know that women can conceive during menstruation. Nearly a third thought homosexual preference could be determined by someone's appearance. Least accurate responses were given by persons with less than a high school education.²²

We often hear that sex education should be left to the parents, but these findings indicate we need to educate the parents. This should be a shared responsibility with the involvement of churches, civic organizations, worksites, schools and communities. We can no longer look at the family as an isolated unit that would resist any intervention as interference.

It is time to realize that too many parents are feeling trapped in a cycle of despair brought on by the problems of poverty or teen pregnancy—incomplete education, welfare dependency, or an unstable family life.⁷ These parents see little hope of improvement for themselves. How can they inspire hope in their children? Other parents are seeing their time with their children restricted because of the need for a two-income household and the demands of a busy lifestyle. Many of them want the instruction, counseling and peer discussion a parental support program could provide. Again, community resources could be called on for help. We must sell our employers, civic leaders, schools, and governments on the idea that community progress is tied to the strength and progress of the family. For parents living in poverty, the realities of hunger, violence and destitution far outweigh the desire to be model caregivers.

4. Male Responsibility

My fourth prescription calls for a new focus on the silent partner in the teen pregnancy dilemma. We need to reinforce Male Responsibility. We must teach our

young men that being a father requires more than donating a sperm. For too long, we concentrated only on the female in family planning and pregnancy prevention efforts. The male has all but been ignored. This is evident even in research. There are few studies on the male's role and profile as a teen father. Most of the studies have been aimed at the teen mother, who is obviously less difficult to find. Some researchers question the reliability and accuracy of studies about the fathers of babies born to teen mothers. They contend that even if the father is located, they are generally less willing to participate in surveys for several reasons: they are reluctant to divulge personal fertility information, unaware of their paternity, and fearful of being held accountable financially.²⁴

That fear of financial accountability is something we need to address. I have asked my state legislature to consider this proposal—that we take the top 17% of the father's salary for child support until his child is 18. We could facilitate the collection of the child support by requiring the social security number of the father on every child's birth certificate. If young men know that they will be held responsible for any child they help conceive, perhaps they will think about the consequences of their actions.

We need to give our young males and females the belief that they can accomplish more in their lives than procreation. All community resources must be summoned for support in providing the opportunities for growth and self-expression in other arenas of life.

5. School-based Health Services

My fifth prescription has probably generated the most controversy in Arkansas and perhaps the most interest outside the state. Comprehensive School-based Health Services should be made available to all of this nation's children.

Our children, as we have seen, are at a definite disadvantage in receiving preventive health care. Comprehensive school health services, coordinated with comprehensive school health curricula, provide children with resources they need to overcome these disadvantages. More importantly, they make the needed services accessible to children. The American Medical Association found many barriers that interfere with adolescents accessing existing health services for adolescents, including insufficient health insurance coverage, parental consent requirements, breaches of confidentiality between adolescents and the providers, and poor compliance with advice.⁸ School-based clinics, properly instituted, can remove most of those barriers.

It is the family life counseling and contraceptive services that have drawn the most vocal opposition from right-to-life and right-wing groups, which claim the clinics promote abortions. School-based health services provide comprehensive primary health care services—including pregnancy prevention—not abortions. It is plainly obvious that if a child is not pregnant, she does not need an abortion. Furthermore, the need for an abortion by any child represents a personal failure for every citizen in this country.

While these opponents are very vocal, they are apparently in the minority. Sixty-nine percent of the respondents to a 1987 AMA survey agreed that a clinic is needed in their community to provide adolescent health services, including help with sexual problems and birth control.⁸

In Arkansas, the Department of Health operates several such programs in public schools. Our approach is to offer a menu of specific services from which the local school boards may choose. A contract is written between the department and the school board clearly establishing responsibilities for space, utilities and administrative support (provided by the school) and personnel, equipment and supplies (provided by the Department of Health).

Last year, a comprehensive clinic was established at Central High School in Little Rock, where 36% of the 1,800 students signed up to use the clinic. Records were started for 558 students, though approximately 200 more came in for services such as condom distribution. Tests for sexually transmitted diseases were performed in 121 cases, and 52% were positive. Ten young women had pre-cancerous growths of the cervix. Fourteen pregnancies were reported during the school year, but only three of those were among clinic users.²⁰

Presently, more than 160 comprehensive school-based health service programs exist in the U.S. More than 90% provide physical assessment and referral, diagnosis and treatment of minor injuries, primary health care, health and nutrition education, and counseling for pregnancy, mental health and sexuality. Less than 25% dispense contraceptives and counsel for employment.¹

6. College Tuition for Good Students of Poor Families

My sixth prescription calls on us to offer free college tuition and books at a state-supported school to all children with (1) a B average or above, (2) a good citizenship record, and (3) a family income of \$20,000 or less.

There are already several programs which attempt to encourage at-risk students to stay in school. In New York, philanthropist Eugene Lang promised college tuition to students at PS 121 in East Harlem who finish high school. From this, the I Have a Dream Foundation was developed to help students in other cities gain similar opportunities.⁷ Cleveland is experimenting with setting aside college tuition for high school students who achieve specific grades. In Cincinnati, Partnership in Education, funded by the Kroger Company, rewards students with funds for college tuition. Fifteen or more states have considered similar legislation.

Patrick Taylor of New Orleans studied engineering at Louisiana State University on a full-tuition scholarship. He founded an oil firm in the late 1970's. A decade later, he challenged 180 failing seventh and eighth grade students to take college preparatory courses, maintaining a B average, and stay out of trouble. If they managed this, he told them, their college tuition would be paid. As the students entered their tenth and eleventh grades, two had become pregnant and several moved out of the area. Eighty percent remained in the program.^{12,14,26}

Taylor's plan was adopted by the state of Louisiana. Act 789 of 1989 set admissions standards and requires the state to pay tuition and fees for qualified students from low and middle-income families. Approximately 500 students have already begun to take advantage of the new law, and at least fifteen states have considered similar legislation.²⁶

We must recognize that it is cheaper to offer young people the opportunity for a college education than it is to warehouse them in a prison system with no hope. We cannot afford to do otherwise.

Conclusions

How can we overcome the barriers that stand in the way of making these strategies for the '90's a reality? Fundamentally, we must **CARE** enough to want to make a difference.

We must have the **Courage** to attack attitudes which prevent us from committing ourselves to the idea that all children born in this country deserve to be given equal opportunity. As we seek to understand and cure the fundamental problems of at-risk and pregnant children, we are confronted by the fact that society's reluctance to face these problems helps perpetuate them. By subjecting poor and minority children to inferior schools and low standards of learning, society consciously or unconsciously perceives and treats at-risk children as if they were expendable. Early in their lives these children are programmed to be victims of a prophecy that they cannot benefit from the standards and quality which are provided for children from more privileged groups.

This pattern of inferior education, of low standards and expectations, continues throughout secondary school and culminates in failures, dropouts, and pushouts. The victims become aware that they are ignored, rejected, and neglected, and that schools, which are the inescapable agents of society, are not preparing them to play an economically and socially constructive role in American life.

The very foundation of democracy is being eroded as our young people struggle within America's own form of social concentration camps. The plight of youth-at-risk will not be remedied until the social insensitivities of the larger society are faced and eliminated. A society which tolerates educational inferiority of less privileged young people fosters a policy that fundamentally risks not just the children, but the society as a whole.

We must further care enough to make **Awareness** of the problem, as well as **Advocacy** and **Action** plans, a part of every segment of our community. Governmental agencies (local, state, and federal), civic organizations, business organizations, religious organizations, schools, and community groups must all become involved in providing opportunities for our youth. The Carnegie Council of Adolescent Development recommends engaging all levels of society in this movement, from the President to the children. We have to work from the bottom-up, as well as top-down, if we are to solve this problem. We must become true advocates if we are to make inroads into the problems that are wasting our most valuable resource.

It is not enough just to be an advocate. We must also develop an action plan that is truly effective—one that allows us to communicate, collaborate, cooperate, and develop partnerships. There are no magic bullets that can solve our problems. We will always need a comprehensive array of policies and programs targeted to the special characteristics of diverse communities and to the varying circumstances of teenagers of different ages and from different social, cultural, and economic backgrounds.

Next, we must care enough to be **Responsible**, to use all available **Resources** in our communities to jointly plan and form partnerships. Our broad goals must reach and apply to all young people. We must give them hope by helping them all to be healthy, educated, and motivated. We must stop blaming the children for

their plight and put the burden to create solutions squarely where it belongs — on our society.

Lastly, we must care enough to **Empower**, to motivate and jolt communities into becoming involved with their children, their schools, and their destiny. We must show these communities that they have the power to choose the policymakers whose decisions will direct the destiny of their children. We must stop allowing five percent of the people to make decisions, while ten percent of us watch but do nothing and eighty-five percent of us do not even know what is happening.

We must stand up and become a power for the powerless. We must build a bridge of hope to our children, then give them the ability to cross that bridge. We must **CARE** enough to fill in the gaps that allow too many children to fall off that bridge, through our safety net and into a river of ignorance and poverty.

In order to save this nation, we must save our children. We cannot afford to waste this generation. We must make sure that the prescriptions I have written for the '90's are filled, so that all of our children can walk across the bridge out of poverty. We can change, we can make a difference, and we must try.

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