

**The dimensions of poverty among children in the United States: an exposition of causes and consequences. Epilogue to the Curriculum for Poor and Underserved Children of the Ambulatory Pediatric Association, 2002.**

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## **INTRODUCTION**

No one can say how the presence or absence of societal forces, the strengths and weaknesses of family life, and the intrinsic qualities of a child will interact to affect the life of any particular child. Conditions of prolonged poverty within a community will result in some of the families becoming part of an underclass, with the children remaining in poverty throughout their lifetime in a "cycle of chronic poverty." (1,2) This is the case in the United States today where over 18 million children live in poor families.(3,4) An estimated 10 percent of these children have an inadequate diet, are hungry, or malnourished. (5)

The consequences of poverty are not isolated occurrences in a child's life. Their prevalence is predicted by the nature of public policy and how it is administered.(5-11) Failed or inadequate public support leaves children and families with less personal resources most affected.(5,7,8) Unfortunately, making life harder for those with the least resources that has characterized contemporary life in the United States. (3,5,7-10) What should happen -- more support for families with poor children -- does not happen. Respect and support for the poor is called for, rather than belittlement and neglect. As the economist Amartya Sen writes,

"It is important to see human beings not merely as recipients of income but as people attempting to live satisfactory lives and to see poverty not simply as low income but as the lack of real opportunities to have minimally adequate lives" (11)

This commentary offers an appreciation of the consequences of chronic poverty, including its definition and prevalence, the environment in which it occurs and its effect on family structure, parental self esteem and behavior. An overview of pediatric advocacy for eliminating poverty and approaches to poor families with children is provided.

## **HOW MALDISTRIBUTION OF RESOURCES PRODUCES POVERTY**

It is in the nature of autocratic developing countries to be unwilling to respond to social dislocation with an allocation of resources to a dispossessed class. (7) Malnutrition and hunger, for example, occur when food is considered an entitlement which can be taken from groups of people who are deemed insufficiently valuable to society for them to eat well. (7,11) At present, vulnerable groups in the United States (e.g., the homeless, teen mothers and infants of the poor) can not assert an ownership right to the essentials of life -- an adequate diet, a place to live, good schools or a safe environment. By contrast, all industrial democracies, much more so than the

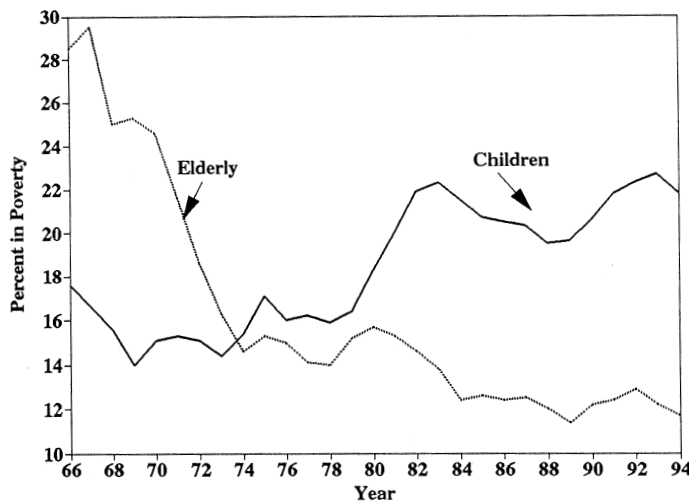
United States, have social policies which take advantage of the wealth generated by free market economies to maintain the general well-being of their people. (3,5,12)

In a survey that ranked 18 industrial nations by the wealth of the wealthiest and poverty of the poorest (income at the 90th and 10th percentiles adjusted to U.S. dollars, respectively), the United States ranked first for wealth and 16th for poverty. (12) Our rich are richer and our poor are poorer. We have an income ratio for rich-to-poor of 6-to-1 as compared to no more than 4-to-1 for the other 17 nations. In addition, unlike the other industrial democracies, essential services for poor children are not universally available here. (3,12,13)

This critique acknowledges that important steps have been taken to create social safety nets in the United States. These have worked particularly well for the elderly.(3,14) The introduction of Social Security in 1935, Medicare in 1965, supplemental funds to Social Security in 1974, and the United States Department of Agriculture's food supplementation programs, including Food Stamps (1964), has reduced the percentage of elderly Americans with incomes below the poverty level from 28% in 1967 to 11.5% in 1994.(3) By contrast, the percentage of children living in families with incomes below the poverty level has risen from approximately 18% in 1966 to 22% in 1994. As Rebecca Blank writes,

"In 1993 elderly poverty rates were at an all time low while children's poverty rates were at their highest level in 30 years. The contrast in poverty trends among these two groups is striking." (3, p20)

**Figure 1**



Poverty rates among children and the elderly, 1966-1994 (3, p19)

Poverty reduction among the elderly is clearly one of the great public policy success stories. The role of government programs providing direct income support, reduced taxes, and supplemented nutrition cannot be overstated. For families with children, however, the support has been less than adequate, and less support has meant more poverty. (14) The change in numbers of children and elderly lifted from poverty by government supported programs is shown in the table, below.

**Table 1**

**POVERTY IN THE ELDERLY AND AMONG CHILDREN, 1995**

	<----- ALL NUMBERS IN MILLIONS ----->			
	<b>Living in poverty without govern- ment support</b>	<b>Taken out of poverty by gov- ernment support</b>	<b>Actually living in poverty</b>	<b>Percent reduction</b>
<b>The elderly</b>	15.8	13.0	2.0	92
<b>Children</b>	17.1	5.7	11.4	33

CAPTION: Without government support, the numbers of the elderly and of children living in poverty would be about the same. (From Primus, 1996 (14))

**DEFINITIONS OF POVERTY AMONG CHILDREN IN THE UNITED STATES**

Poverty means having economic resources below those needed to "obtain a minimally adequate standard of living" and/or essential goods and services.(13) Poor people survive without adequate income, capital, or other resources such as land inheritance, kinship networks or other transfer of income or benefits from governmental programs.(3,13,15-20) Their poverty prevents them from becoming self-supporting.

For over 40 years, the United States has used an **absolute definition** of poverty which is an income three times the value of the U.S. Department of Agriculture's Low Cost Food Plan for a family unit. (13) This definition was designed to meet the needs of a family arising from sudden tragedy such as the death or incapacitation of a miner leaving a widow without income. It assumes economic dependency. (3,13)

Many people in the United States, however, have used a **subjective definition** of poverty. The poor have been seen as inherently inferior and incapable of achieving worth. Their poverty is a measure of their worthlessness. (3,5,9,10,17,18) This belief influences our perception of which poor people deserve support and which other ones do not. The belief is based on how well the poor harbor their resources and whether they behave according to ill-defined standards of middle-class normality. (9,10,18) To prove their worthiness, the poor must conduct themselves according to moral standard to which people with higher incomes do not meet and are not held.

Simplistic, subjective definitions of poverty fail to convey the misery affecting poor families. For poor people, every behavior is shaped by the power of an environment in which they must live but are unable to change. (17,18) Some individuals born to families living in poverty do excel and do escape poverty, but for the aggregate, every measure of how people live, how they perform, and what they accomplish is affected.

Recently, a sub-committee of the National Academy of Science suggested a **relative** definition of poverty to replace the absolute standard.(13) This definition recognizes that eliminating structural barriers to escaping from poverty is a contingency for economic success. (3,7,8) People living in chronic poverty require sufficient resources to escape dependency and enter the work force. The relativist model recognizes that income is needed not simply to survive (food and housing) but also to work (cost of education, health care, clothing, day care and transportation).

The strength of the relativist model is that it addresses the complexity of poverty and points to the public policies needed for people to work, sustain self respect, nourish and nurture children and escape poverty. It avoids the absolute model's emphasis on dependence and the prejudicial and inaccurate assumptions inherent in subjective definitions. Further, it helps break away from the "nature versus nurture" and "public policy versus individual responsibility" debates which have paralyzed the political process in the United States.

Recalculating the percentage of family income from employment or from unearned income shows an almost identical percentage of workers and those living on unearned income at all income levels.(13) Just like the affluent and middle income, some poor people do not work. Most poor people, however, including those living on public assistance, do work and at difficult jobs with little opportunity for advancement.(15) As Edin and Lein show, mothers attempting to live on income solely from welfare benefits will starve their children unless they receive undeclared income; if declared, income lessens benefits (15)

For those working at incomes below the poverty level, more work does not result in an increase in discretionary income. (15,19,20) More work only lessen the gap between what is earned and what is owed to pay for necessities. At the poverty level, a drop in income or in-kind assets of \$50 per month makes the difference between hunger in childhood and barely meeting children's need for food.(19)

## **PREVALENCE OF POVERTY AMONG CHILDREN IN THE UNITED STATES**

Data from 1993 U.S. Census reports show that almost 18 million (22.7%) of the 62.3 million children in the United States under 18 years of age live in poverty using an absolute definition provided above.(4,5) the majority of poor children are white (9.75 million children; 9.4% of total for category). African- American ancestry children account for 5.12 million (46.1%) and for Hispanic ancestry children 3.87 million (40.9%) are similarly affected. (4)

Citro and Michael, authors of the National Academy of Science study, have recommend "that the poverty threshold concept apply to a reference family of two adults and two children with threshold adjusted for families with special needs." (13,p101) Adjustment using the relative model would **not** shift a one parent/two child family from being categorized as poor to non-poor if they were receiving aid-to-dependent families support.(13) A family with full time employment and a full range of deductions that pays for child care, work expenses and out of pocket medical expenses, would be re-categorized as "poor." With respect to rural poverty, there would be no change poverty status for a farm worker with similar deductions as a city-living family because the cost of city living is thought to be higher.(13)(1)

The current poverty level income for the two parent/ two child reference family is \$14,306. The reference family, however, may no longer represent the norm. In the United States, households with one adult (25%) are most common, and adults without children (22%) second. The two parent/two child reference (13%) is the third most common.(4,5) As shown in Table 2, 9% of children in reference families live in poverty as compare to 25% of children living in single parent families of five or more; Forty eight percent of families with two children and one adult and 65% of three children families with a single parent live in poverty.(5)

**Table 2**

**CHILDREN UNDER 18 YEARS IN FAMILIES LIVING IN POVERTY**

ratio =		families living in poverty with children under 18 years							total similar families		[All in 1,000s]
		NUMBER OF CHILDREN IN THESE FAMILIES									
		7	6	5	4	3	2	1			
<b>one</b>		15	30	74	294	690	1220	1321			
<b>adult</b>		15	32	78	350	1067	2538	3601			
		percent of these families in poverty									
		100	94	95	84	65	48	37			
		absolute number children affected = # in family x # affected [All in 1,000s]									
		105	180	370	1,176	2,070	2,440	1,321	Sum = 7,662		
		percent of these families in poverty									
<b>two</b>		47	25	101	253	581	825	578			
<b>adults</b>		67	68	246	1017	3826	9589	8072			
		percent of these families in poverty									
		70	37	41	25	15	9	7			
		absolute number children affected = # in family x # affected [All in 1,000s]									
		329	150	505	1,012	1,743	1,650	578	Sum = 5,967		

CAPTION: For one adult/three children families, the poverty level is \$14,705 per year as compared to \$11,602 for one adult/two children families and \$14,654 for reference families with two 2 adults and two children. (from Census Data and Karp, 1999)

These data belie the myths surrounding poverty. Poverty is not only found among children in single parent families, neither is it unique to families with pregnant teens, large families supported exclusively by welfare, among non-whites, in inner-city or rural ghettos, or with parents who are unwilling to work. (3) "Pieces of the whole truth contained in each of these preconceptions," notes Rebecca Blank, "should not obscure a composite reality that is far more false than true."(3)

**CONSEQUENCES OF POVERTY AMONG CHILDREN IN THE UNITED STATES**

In the context of chronic poverty, income is too low and the variety of expenses too great and too varied to ensure adequate caloric and/or micronutrient intake.(5) The consequences include lack of adequate resources for health care,(21) growth failure, (22,23) iron deficiency,(24,25) and poor school achievement. (1,5,26,27) Furthermore, poverty exacerbates problems which affect children at all levels of income. (28,29)

Consider asthma (30,31) and obesity.(32) The course and consequences of asthma vary dramatically according to the economic resources of the family. (30,31) Asthma in the poor might just as well be a different illness than asthma in families with resources to prevent and treat the disorder. Obesity is often found among children whose families live at the edge of poverty, in part

because they now use sporadic resources for food to compensate for past and present deprivation.(32) The opportunity for physical exercise in safety, taken for granted among soccer crazed suburbanites, are often limited for the urban poor. Of note, anorexia nervosa is almost never seen in families that have experienced food deprivation in recent generations.

## **POVERTY AS CAUSE RATHER THAN CONSEQUENCE OF BEHAVIOR**

Bloom defines a "powerful environment" as a persistent set of forces which affect the characteristics of virtually an entire population. (17) Chronic poverty shapes the lives and behaviors of affected children, their families, and communities. (1-3,5-11,33-36) As a result, notes Alan Meyers, a child living in chronic poverty" grows up without self-esteem or developing essential skills, fails in school, and repeats the pattern of hopelessness as a young adult." (33)

Some of the common consequences of living in chronic poverty include an inability or unwillingness to use the resources of the dominant society ( called "disengagement" by Oscar Lewis), (37) economic dependency, and children being raised by single mothers without a father present. (1,2,5,7-10) These families have the "poverty syndrome" (38) They are affected by "cluster effects of poverty" (39) and are caught in "cycles of poverty and disadvantage." (1,2,5)

All of these terms describe the complex relationship among poverty, its causes and its consequences in developed countries where the very poor are a minority. Yet, as well documented by Hakim and Solimano in the 1970s (40) and more recently by Wilson, (7,8) Katz, (9) and Gans,(10) the disengagement is mutual. The dominant society is unwilling or unable to provide sufficient resources for a majority of poor children to escape poverty. (21)

### **A historical perspective**

The Puritans settlers in America saw material well being as a sign of divine grace and its absence as a lack thereof.(3,9,10) Subsequently, at the turn of the 20th century, the eugenics movement provided a scientific veneer for this attitude with its emphasis on "hereditary feeble-mindedness" as the cause for mental retardation, social dysfunction and inability to rise from poverty. (41-43) In the 1950s and 60s, Oscar Lewis developed a theoretical construct, the "culture of poverty"(37) to appreciate how and why poverty in one generation was maintained in succeeding ones. It was not Lewis' intention to label or degrade the poor, but his descriptions of economic dependency, sexual promiscuity and "disengagement" as cultural characteristics of poverty undermined efforts to address fundamental economic issues.(7-10)(2)

Two contemporary books, Beyond Racism and The Bell Curve, provide updated versions of culture of eugenic and poverty theories. The fallacy in both these oversimplifications is that comparisons of behavior within poor communities rather than between poor and non-poor ones lead to the false assumption that poverty is a consequence of behavior rather than of economic circumstances and a failure of imagination and commitment by society-at-large. Moreover, a walk through any impoverished community will reveal the heterogeneity of poverty. Boarded and abandoned homes are adjacent to meticulously repaired ones. Sometimes the

door of the most decrepit house or apartment opens to a home characterized by simplicity, order and affection for children. At other times, the visitor is greeted by an overwhelmed and ineffective parent and children living in chaos.

The barrier between the poverty and affluence is surely permeable, though racial and ethnic prejudices have served as a caste rather than class barriers to success. Anyone who has lived through the turbulent 1960s and 1970s has witnessed the descent of children of affluence as well as a rise from poverty by highly accomplished colleagues and friends. The difference is in the availability of resources to prevent the social dislocation children of the affluent. These have been denied to the poor.

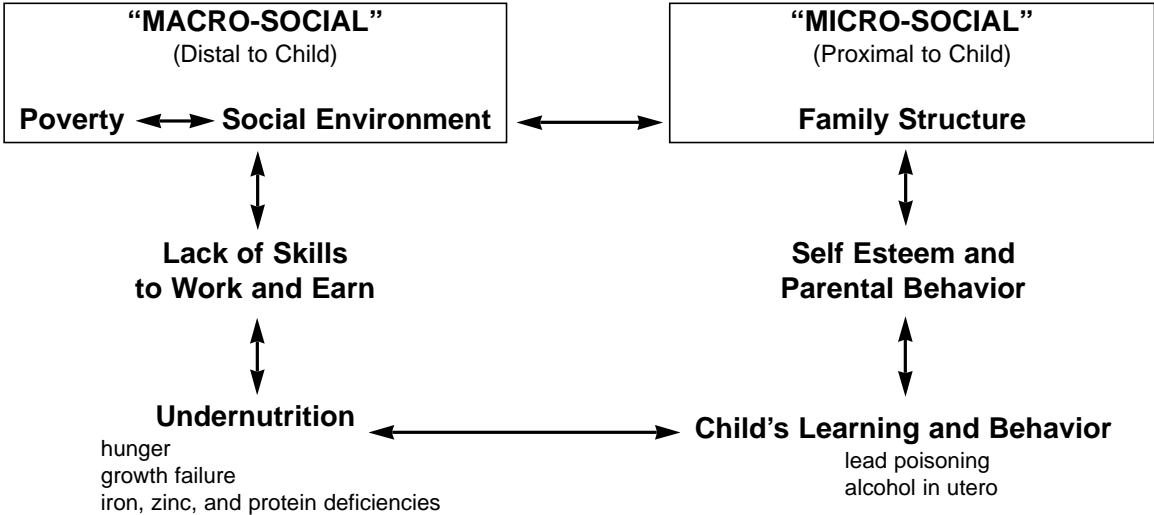
Poverty does not reflect an inevitable downward mobility of an inferior racial stock or culture. "The poor," writes David Rosen, "are not dysfunctional operators in a limited resources base. [They] are highly adaptive actors in an essentially dysfunctional economic system." (18) The fact that some poor families survive the most severe consequences of poverty is no justification for abandonment of the poor or for denigration of families who are caught in the "cycle of poverty."

**Malnutrition and the cycle of poverty**

The elements associated with living in poverty in the United States -- malnutrition,(23-25) learning failure, (26,27,44) poor self-esteem,(33,34) and dysfunctional or ineffective parental behavior (45,46) feed upon themselves to regenerate poverty, from one generation to the next. (1,2,5) Iron deficiency and growth retardation in childhood affect both learning and behavior. (1,27,47)

**Figure 2**

**MALNUTRITION and THE CYCLE OF POVERTY**



Children live in the world of their parents and the institutions that serve them directly. This is their "microsocial environment." For the casual observer, failures in the nurturing of children within that proximal seem obvious and may be seen as the sole cause for the consequences of poverty.

What is not seen is the way that the "macrosocial environment," distal to the child's life the schools, health care system, opportunities for work fail the family and affect child welfare indirectly depriving the poor of "real opportunities to have minimally adequate lives" (11) Life below the poverty level means that increased work does not generate the rewards available in the society-at-large. Some of these observations relate to the hard fact of not having discretionary income, (15,19,20) but perhaps what may be more important is the effect on self-worth. The poor are trapped in a life where increased opportunity does not follow increased effort. As such, the life experiences of the poor contain meaning independent of the external social reality, at least as it is understood by those with greater opportunities in our lives.(26)

## INTERVENTIONS

This commentary has attempted to show that the primary causal responsibility for the consequences of poverty is poverty itself, a "macrosocial" failure. Why is it that some children have opportunities in school, safe playgrounds and well stocked libraries, and enough food to eat well while others are at constant risk for hunger and malnutrition? This societal neglect, operating at a distance from the poor family, is followed by behavioral responses, a "microsocial" failure.

### Ending Income poverty

In 1971, Robert Lampman presented four mechanisms for ending income poverty, drawing equally from the philosophies and vernaculars of the political left and right.(48) He recognized that no solution, taken alone, could be effective. Lampman's mechanisms are shown in the table below.

**Table 3**

#### **A RESPONSE TO POVERTY THAT ADDRESSES THE CONCERNS AND COMMITMENTS OF THE POLITICAL 'LEFT' AND THE POLITICAL 'RIGHT'**

##### **ON YOUR LEFT**

Address failings of market economy to deliver essential goods and services to the poor

Provide direct support to those unable to work

##### **ON YOUR RIGHT**

Promote a vigorous market economy to generate wealth

Address the failure of the poor to take advantage of opportunities provided

CAPTION: From the work of Robert Lampman, 1971.



More recently, Blank has shown that the effectiveness of market economies in generating wealth has not been matched with a mechanism for providing essential services. (3) These are not possible without governmental intervention through enlightened tax policies, supplemental income to obtain essential goods and services, and, at times, direct subsidy. (3,7,11,13-15) Simply stated, the cost for goods and services most needed to keep the most impoverished workers well-nourished, well-housed and able to get to work is often beyond these workers' means. The scandal of the 1990s has been that an economy generating so much wealth has driven the cost of necessities beyond what those who produce that wealth can afford. Again, the solution requires changes in public policy and governmental intervention in the workings of the market place.

It is unfortunate that interventions on behalf of the poor are seen as hostile to economic development. As Sen argues, in the long run eliminating poverty and its consequences enhances, rather than hinders, economic development. (7,11)

### **Engaging families in the process of nurturing their children**

Beyond public policy, personal commitments to poor children, their families and communities are required to make the best public policy work. Often, the first step for a person to leave the world of disadvantage is a personal contact with another human being who offers help when it is needed and wanted. It was that one person "in the right place at the right time," who cared enough to listen and to respond who made the difference. (49) Committed people being at "the right place" to establish and maintain trust is a prerequisite for care of the disadvantaged.

Here are a list of essential elements for the provision of care to all poor children drawn from the work of Calvin Sia:(50)

1. Engage the family with a single provider.
2. Make sure that provider has support from a health care team on the same site a medical home.
3. Teach child development and effective parenting.
4. Examine the extended family to locate a "pivotal person" (49) and emphasize the importance of establishing a supportive community for the child and family including religious and/or social organizations.
5. Help parents make the right connections to get back into school and obtain work, family planning, and day care.
6. Be clear about expectations. Don't let either sympathies for the plight of the poor or concerns for life style issues get in the way of providing support and making reasonable demands. It is especially important to recognize when support is not the answer, and there may be a need to remove the child from a home that is neglectful or abusive.

We must go beyond saying what to do. Rather, we must show how to do it.

## SUMMARY

It is necessary to challenge the notion that either societal neglect or aberrant personal behavior constitute a single cause for the multiple problems faced by poor children and their families. An emphasis on the dichotomy between failed public policy, on the one hand, and seemingly dissolute parental behaviors on the other, leads only to a politicization of poor people's problems. It does not advance any coherent or effective strategies for prevention or treatment of the consequences to children of living in poverty.

Poverty implies insufficient income to obtain adequate goods and services to be able to work and become self supporting. In all other industrial democracies the escape from poverty is enhanced by generous support for food, housing, education, transformation, day-care and health care for the working poor when the cost for all of these goods and services have been raised beyond the ability of those whose work generates wealth for others.(3,5) The goal is to provide non bureaucratic programs providing services to poor people with the respect that they deserve. (51)

Moreover, life below the poverty level means that increased work does not generate increased discretionary income.(15,20) Thus the poor are trapped in a life where increased opportunity does not follow increased effort. There is more to chronic poverty than lack of income, but mass poverty and malnutrition in society is caused by a nation's economic policy and the politics of entitlement. The results of policies that nurture and nourish children yield remarkable improvements in health and social stability.

In the United States, the failure to implement policies supporting poor children and their families raises the question, "In what direction is our society going?" Support for the poorest in society, however, begins with a broad base of support for everyone and an appreciation for how chronic poverty affects the way in which poor children and their families appreciate their experiences in life. (51) Otherwise, notes Robert Chamberlin, "for every family whose functioning is improved by some kind of intensive intervention, several more medium-risk families will take their place as their life circumstances change."(21)

## REFERENCES

1. Sewell TE, Price VD, and Karp RJ. The ecology of poverty undernutrition and learning failure (in) Karp, RJ (Ed) Malnourished Children in the United States: Caught in the Cycle of Poverty. Springer Publishing Co., New York. 1993. p24-30.
2. Rutter M, Madge N. (1976) Cycles of Disadvantage - a review of the literature. Heinemann. London.
3. Blank RM, It Takes a Nation: A New Agenda for fighting poverty. Russell Sage Foundation, New York. Princeton University Press, Princeton, NJ, 1997
4. BUREAU OF THE CENSUS. Current Population Reports. Consumer Income Series P60-188. Income, Poverty, and valuation of Noncash Benefits: 1993. U.S. Department of commerce Economics and Statistics administration.
5. Karp RJ. Malnutrition among children in the United States: The impact of Poverty. (in) Modern Nutrition in Health and Disease, 9th edition. Shils ME, Olson JA, Shike M, and Ross AC (eds) Williams & Wilkins, Baltimore MD, in Press.
6. Sen AK. Poverty and famine. An essay on entitlement and deprivation. Oxford University Press. New York, 1983.
7. Williams WJ. The Truly Disadvantaged: The inner-city, the Under-Class, and Public Policy. University of Chicago Press, 1987.
8. Williams WJ. When work disappears: The world of the new urban poor. Alfred A Knopf, New York, 1971.
9. Katz MB. The Undeserving Poor. Pantheon Books, New York, 1989
10. Gans H. The war on the poor. Basic Books, New York. 1996
11. Sen AK. The political Economy of Hunger (WIDER Studies in Developmental Economics Oxford University Press, New York, 1995.
12. Rainwater L, Smeeding T. A comparative study of children's wealth. Luxembourg Income Study (LIS) working paper no 127. Syracuse university, 1995.
13. Citro CF, Michael RT. (eds) Measuring Poverty: A New Approach. National Academy Press. Washington DC, 1995.
14. Primus, W. The safety net delivers: The effects of government benefit programs in reducing poverty Center on Budget and Policy Priorities Notes. Washington, DC. November 15, 1997.

15. Edin K, Lein L. Making Ends Meet: How Single Mothers Survive Welfare and Low-Wage Work. Russell Sage Foundation, NY, 1997.
16. Rural sociological task force. Persistent Poverty in Rural America. Westview Press, Boulder CO, 1993.
17. Bloom BS. Stability and Social Change in Human Characteristics. New York, Wiley and Co, Publishers. 1964
18. Rosen D. Paralyzes of response to poverty (in) Karp, RJ (Ed) Malnourished Children in the United States: Caught in the Cycle of Poverty. Springer Publishing Co., New York. 1993. p250-252.
19. Olson C, Rauschenbach BS, Frongillo EA Jr, Kendall A Factors contributing to household food insecurity in a rural upstate New York county. *Family Economics and Nutrition Review*. 1997;10:2-17.
20. Mukerji N. Expenditure Patterns Among Welfare Recipients. Unpublished Ph.D. Thesis, Department of Economics, Princeton University, Princeton, NJ, 1998.
21. Chamberlin RW. Preventing low birth weight, child abuse, and school failure: the need for comprehensive, community wide approaches. *Pediatrics in Review* 1992;13:64-71.
22. Frank DA, Roos N, Meyers AM. et al. Seasonal variation in weight for age in a pediatric emergency room. *Pub Health Rep* 1996;111:366-71.
23. Meyers A, Frank D, Roos N, et al. Housing subsidies and pediatric undernutrition. *ARCH PED ADOLES Med* 1995;149:1079-84.
24. Pilch SM, Senti FR. Assessment of iron nutritional status of the United States population based on data collected in the second National Health and Nutrition Examination Survey, 1976-1980. Bethesda, MD; Life Science Research Office, FASEB. August, 1984.
25. Karp RJ, Fairorth J, Kanofsky P, et al. Effects of Rise in Food Costs on Hemoglobin Concentrations of Early School-Age Children, 1972-1975. *Public Health Reports*, 1978;93:456-459.
26. Wachs TD. The Nature of Nurture. Sage Press, Newbury Park, CA, 1993
27. Wachs TD Relation of mild to moderate malnutrition to human development. *J Nutrition*. 1995;125:2245-54S.
28. Wise PH, Meyers AF. Poverty and child health. *Ped Clin NA*. 1988;35:1169-86.
29. Genel M. Socioeconomic status, health and health systems. *Pediatrics* 1997;99:888-9.

30. Weitzman M, Gortmacher S, Sobol A. Racial, social and environmental risks for childhood asthma. *Am J Dis Children*. 1990;144:1189-94.
31. Lozano P, Fishman P, VonKorff M, Hecht J. Health care utilization and cost among children with asthma who were enrolled in a health maintenance organization *Pediatrics* 1997;99:757-64.
32. Dietz WH Does hunger cause obesity? *Pediatrics*. 1995;95:766-7.
33. Meyers, A. Children and poverty *JAMA* 1997;227:1172-3.
34. Sidel R Women and children last: The plight of poor women in affluent America New York Viking, 1986.
35. Miller JE. Developmental screening scores among preschool-aged children: The roles of poverty and child health. *Journal of Urban Health. Bulletin of the New York Academy of Medicine*. 1998;75:135-52.
36. Miller JE, Korenman S. Poverty, growth and cognitive development of children in the United States. Working paper no. 93-5. Princeton University Office of Population Research, 1993.
37. Lewis O. The culture of poverty. *Sci Am*.1966;215:19
38. Gopalan C. Undernutrition: measurement and implication. (in) *Nutrition and poverty*. (In) Osmani SR (ed) Oxford University Press, Oxford/New York, 17-48.
39. Sameroff A, A, Seifer R, Barocas R, et al. Continuum of risk for low birth weight infants. *Pediatrics* 1987;79:3453-50.
40. Hakim P, Solimano G. Nutrition and national development: Establishing the connection. Center for International Studies. Massachusetts Institute of Technology. Cambridge MA, July, 1975.
41. Goddard HH. The Kallikak Family: A study in Feeblemindedness. New York, Macmillan & Co., 1912.
42. Karp RJ, Qazi QH, Moller K, Angelo WA, Davis JM. Fetal alcohol syndrome at the turn of the 20th century: An unexpected explanation of the Kallikak family. *ARCH PEDIAT ADOLES MED* 1995;149:45-8.
43. Kevles DJ. (1985) In the Name of Eugenics: Genetics and the uses of Human Heredity. Alfred A. Knopf, New York. 1985
44. Strupp BJ, Levitsky DA Enduring cognitive effects of early malnutrition: a theoretical appraisal. *J Nutrition* 1995;125:2215-32S.

45. Casey PH, Bradley R, Wortham B. Social and non-social home environments of infants with non-organic failure to thrive. *Pediatrics* 1984 73:348.
46. Hurt H, Malmud E, Braitman LE, et al. Inner City Achievers: Who are they? *ARCH PEDIAT ADOLES MED.* 1998;152:993-7.
47. Lozoff B, Jiminez E, Wolf AW. Long-term developmental outcomes of infants with iron deficiency. *New Eng J Med.* 1991;325:687.
48. Lampman R. Ending Income Poverty. Markham Press, Chicago, IL, 1971.
49. Sia CC The medical home: Pediatric practice and advocacy in the 1990s. *Pediatrics* 1992;90:419-23.
50. Bradley JA. Nutrition and Nurture (in) Karp, RJ (Ed) Malnourished Children in the United States: Caught in the Cycle of Poverty. Springer Publishing Co., New York. 1993.212-16.
51. Schorr LB. Within Our Reach: Breaking the Cycle of Disadvantage. Anchor/Doubleday, NY 1990.

Available from: <http://web1.tch.harvard.edu/pediatric/SUS/sus.html>, the web site for serving the Underserved, a project of the Ambulatory Pediatric Association

## END NOTES

1. This may be an idealized view of life of the rural poor. In some areas, food and transportation costs are extremely high. Land is often unavailable, and the housing stock is expensive to rent and is often deteriorated. Poor families lack the capital or credit rating to buy or rehabilitate a home.(16)
2. Clifford Geertz provides a definition of culture. "...man is an animal suspended in webs of significance, he himself has spun, and the analyses of it to be therefore....an interpretive one in search of meaning." This is not a description of the poor in the United States. Even those most deeply mired in poverty would abandon that life for any another. Poverty as a powerful environment (17,18)) is a much more compelling description of the reality of chronic poverty.