Poor Children in Rich Countries: How Can We Ameliorate Poverty’s Effects on Child Health

German Society of Pediatrics and Adolescent Medicine
September 2016

Benard P. Dreyer, MD FAAP
President, American Academy of Pediatrics
Professor of Pediatrics, NYU School of Medicine
Bertelsmann Study:
Child poverty in Germany continues to grow - with consequences for life
Sept 12, 2016

Kinderarmut in Deutschland wächst weiter – mit Folgen fürs ganze Leben


Trotz guter Wirtschaftslage wuchsen 2015 bundesweit 14,7 Prozent der Kinder unter 18 Jahren in Familien mit der unter 1,5-Mark-Stufe. Im Vergleich zu 2011 ist die
BERTELSMANN STUDY*

- 2015 All Germany 14.7%
- Berlin 32%
- East Germany 22%
- Bavaria much lower

*EU definition: <60% Median Income of Specific Country
Child Poverty Rates in OECD: % Children Living in Households with <50% National Median Income*

*After taxes, tax breaks and cash benefits

All Graphs from UNICEF: Measuring Child Poverty.

14.9 % at 60% EU level

31.1 % at 60% EU level
Relative Poverty Levels: What Does It Mean in Countries with Vastly Different Median Incomes
## Child Deprivation in OECD Countries

**Lacks 2 or More of the Following:**

1. 3 meals a day
2. At least one meal with meat/fish, veggie equivalent
3. Fresh fruit/veggies daily
4. Books suitable for age/development
5. Bicycle, skates, etc.
6. Regular leisure activities (swimming, playing an instrument, sports teams)
7. Indoor games, educational toys
8. Money for school trips/events
9. Quiet lighted room for homework
10. Internet connection
11. Some new clothes
12. 2 pairs properly fitting shoes
13. Can invite friends home to play and eat
14. Celebrate birthdays & holidays
CHILD DEPRIVATION IN OECD COUNTRIES

<table>
<thead>
<tr>
<th>Country</th>
<th>Deprivation Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iceland</td>
<td>0.9</td>
</tr>
<tr>
<td>Sweden</td>
<td>1.3</td>
</tr>
<tr>
<td>Norway</td>
<td>1.9</td>
</tr>
<tr>
<td>Finland</td>
<td>2.5</td>
</tr>
<tr>
<td>Denmark</td>
<td>2.6</td>
</tr>
<tr>
<td>Netherlands</td>
<td>2.7</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>4.4</td>
</tr>
<tr>
<td>Ireland</td>
<td>4.9</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>5.5</td>
</tr>
<tr>
<td>Cyprus</td>
<td>7.0</td>
</tr>
<tr>
<td>Spain</td>
<td>8.1</td>
</tr>
<tr>
<td>Slovenia</td>
<td>8.3</td>
</tr>
<tr>
<td>Austria</td>
<td>8.7</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>8.7</td>
</tr>
<tr>
<td>Germany</td>
<td>8.8</td>
</tr>
<tr>
<td>Malta</td>
<td>8.9</td>
</tr>
<tr>
<td>Belgium</td>
<td>9.1</td>
</tr>
<tr>
<td>France</td>
<td>9.1</td>
</tr>
<tr>
<td>Estonia</td>
<td>10.1</td>
</tr>
<tr>
<td>Italy</td>
<td>12.4</td>
</tr>
<tr>
<td>Greece</td>
<td>13.3</td>
</tr>
<tr>
<td>Slovakia</td>
<td>17.2</td>
</tr>
<tr>
<td>Lithuania</td>
<td>19.2</td>
</tr>
<tr>
<td>Poland</td>
<td>19.8</td>
</tr>
<tr>
<td>Portugal</td>
<td>20.9</td>
</tr>
<tr>
<td>Latvia</td>
<td>27.4</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>31.8</td>
</tr>
<tr>
<td>Romania</td>
<td>31.9</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>66.6</td>
</tr>
<tr>
<td>Hungary</td>
<td>72.6</td>
</tr>
</tbody>
</table>
CHILD DEPRIVATION IN RICH COUNTRIES

Fig. 2b Percentage of children deprived in countries with GDP per capita between $25,000 and $36,000 (PPP)

Fig. 2c Percentage of children deprived in countries with GDP per capita between $36,000 and $36,000 (PPP)

(per capita GDP in parentheses)
SIZE OF PUBLIC SPENDING ON CHILDREN AND FAMILIES

In Kind Public expenditure in % of gross domestic product - Family

Cash - Public expenditure in % of gross domestic product - Family

United States
Switzerland
Norway
Sweden
Germany
United Kingdom
Ireland
Italy
Czech Republic
Canada
Australia
France
OECD

TRENDS IN ABSOLUTE POVERTY IN US & UK AFTER CONSERVATIVE GOVT COMPARISON TO 1994 LEVELS

**Canada Child Benefit**

**June 15, 2016**

- Slash child poverty by 40%
- Rate drops from 11% to 7%
- Almost universal: 90% of people will get some money
- Not tied to work
- Families with children under 6 will receive up to $6400
- Families with children 6-17 will receive up to $5400
- Families making <$30,000 receive maximum benefit
- Phases out after $200,000
- Paid monthly
Poverty is one of the most significant non-communicable diseases children are suffering from today.
CONSEQUENCES OF POVERTY: CHILD HEALTH

- Increased infant mortality
- Low birthweight and subsequent problems
- Chronic diseases such as asthma
- More food insecurity, poorer nutrition & growth
- Poorer access to quality health care and healthy food (transportation, food deserts)
- Increased accidental injury and mortality
- Increased obesity and its complications
- Increased exposure to toxins (i.e., lead) and pollutants

CONSEQUENCES OF POVERTY: WELL-BEING

• More toxic stress impacting EBCD
• Poorer educational outcomes:
  – poor academic achievement
  – higher rates of HS dropout
• Less positive social and emotional development
• More problem behaviors leading to “TAEs”
  – Early unprotected sex with increased teen pregnancy
  – Drug and alcohol abuse
  – Increased criminal behavior as adolescents and adults
• More likely to be poor adults
  – Low productivity and low earnings
• Especially if deep poverty (<50% FPL), long-term poverty, or poverty in early childhood
WHY EARLY EXPERIENCES MATTER

Newborn Brain
Average weight
333 grams

2 Year Old’s Brain
Average weight
999 grams
Dramatic Growth of Neuronal Architecture from Birth to 2 Yrs

700 new synapses created each second in the early years!!
• Among children from lower income families, small differences in income were associated with relatively larger differences in brain surface area.

• These relationships were most prominent in regions supporting language, executive functions and spatial skills.

• Income relates to brain structure most strongly among the most disadvantaged children.
The findings of the Hair et al study showed that poor cognitive and academic performance among children living in poverty was mediated by a smaller hippocampus and frontal and temporal lobes and that the decrease in volume of the latter 2 structures explained as much as 15% to 20% of the achievement deficits found.
Disparities Begin Very Early

Hart & Risley, 1995

Professional
Working class
Poor

Cumulative Vocabulary

Age of Child (in months)

 Meaningful Differences in the Everyday Experience of Young American Children
Betty Hart & Todd R. Risley
30 MILLION WORD GAP

**Language Experience**

- Professional
- Working-class
- Welfare

Estimated cumulative words addresses to child vs. Age of child in months.
Fig. 1. Average percentile rank on Peabody Individual Achievement Test–Math score by age and income quartile. Income quartiles are computed from average family income between the ages of 6 and 10. Adapted from (3) with permission from MIT Press.

Heckman JJ. Skill formation and the economics of investing in disadvantaged children. Science. 2006;312:1900
Figure 6.1 Average reading scores of children from different SES groups—and the gaps between them—change relatively little between kindergarten and eighth grade.

Source: Authors’ calculations using the ECLS-K.
OECD COUNTRIES: SES AND EDUCATIONAL ACHIEVEMENT

Figure 27 Socio-economic status and educational achievement

UNICEF: Innocenti Report Card 13
AAP Agenda for Children 2015-2016
DEDICATED TO THE HEALTH OF ALL CHILDREN™

Health Equity

Poverty and Child Health
Early Brain and Child Development
Epigenetics

Access  Quality  Finance

Medical Home

Profession of Pediatrics

Planning  Implementing  Integration/Integrated
Priority Areas of Poverty Work

• Messaging and Communications
• Supporting Practices to Address Poverty
• Advocacy
• Community Partnership and Engagement
MESSAGING AND COMMUNICATIONS

• Key Messages
  – Poverty is Damaging to Children’s Health
  – Poverty Happens Everywhere
  – Fortunately, we have realistic solutions that we know will work
    • Federal policies work! Without them 1 in 3 children would be poor as opposed to 1 in 5
    • There are also important Federal and state programs that ameliorate the impact of poverty
RECOMMENDATIONS FOR PEDIATRICIANS

• Screen for risk factors within social determinants of health during patient visits
  – Questions about basic needs such as food, housing, heat, child care, making ends meet
  – Refer to community resources
  – We know SNAP, EITC, etc. improve child health and academic success

• Implement integrated medical home programs such as:
  – Reach Out and Read
  – Video Interaction Project
  – Healthy Steps
  – Incredible Years and Triple P (behavioral management)

• Collaborate with community organizations to help families address unmet needs and assist with stressors
INTERVENTIONS IN PEDIATRIC PRIMARY CARE

Reach Out and Read

Advance in Language (months) in 2-5 yrs-olds

P <0.05

Receptive Expressive

6 3

ROR Reaches 4 million children per year:
¼ of all poor children!

- Increased parent-child interactions, vocalizations
- Improved child cognitive, language, and social-emotional development
- Reduced delay, with 50% reduction in need for EI

RECOMMENDATIONS FOR ADVOCACY

• Invest in young children
• Support/expand essential benefits programs
• Support/expand strategies that promote employment and increase parental income
• Improve communities: affordable housing
• Support integrated models in the medical home that promote parenting and school readiness
• Fully fund home visiting
KNOW THE FACTS!

ADDITIONAL RESOURCE

- Executive Summary
- 5 commentaries
- 18 articles
  - Child Poverty: An Attack on our Nation’s Human Capital
  - Who is Poor: The Definition and Measurement of Poverty
  - International Child Poverty Levels and Interventions
  - Child Poverty Interventions in US
“It is easier to build strong children than to repair broken men.”

Frederick Douglass
American Abolitionist
1818-1895
VIELEN DANK!