My Childhood, My Future

Early Childhood Development in the West Bank and Gaza

WORLD BANK GROUP

CHAPTER 14

West Bank and Gaza

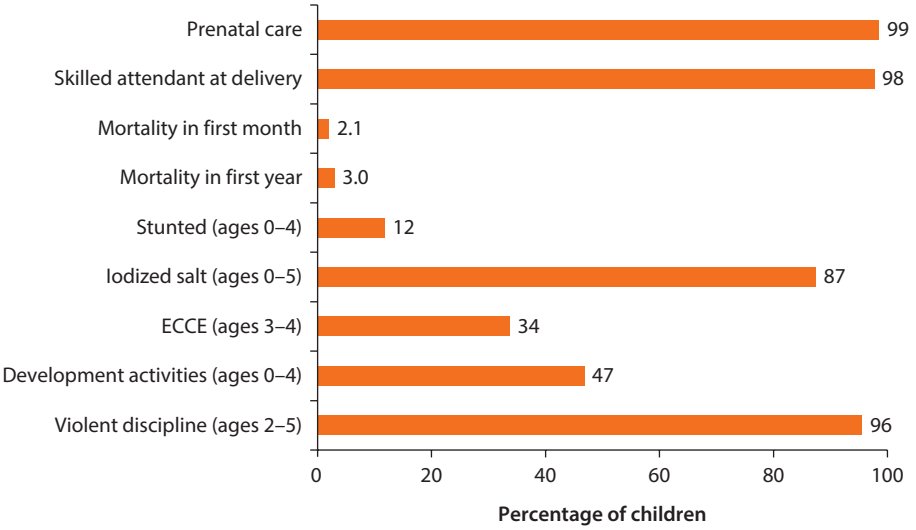
The State of Early Childhood Development in West Bank and Gaza

The state of early childhood development (ECD) in West Bank and Gaza includes major successes in some areas and serious deficits in other areas. Figure 14.1 shows summary indicators of ECD in West Bank and Gaza. In terms of prenatal and delivery care, West Bank and Gaza is doing very well: 99 percent of births received prenatal care, and 98 percent of births had a skilled attendant at delivery. Approximately 2.1 percent of children die in the first month of life, and 3.0 percent of children die in the first year of life. Most children (87 percent) have access to adequately iodized salt, which is important for their cognitive development. However, malnutrition is a problem, with 12 percent of children stunted. Also, in terms of their social and emotional development, children face serious deficits, with only 47 percent experiencing development activities and 96 percent of children being violently disciplined. Moreover, children have limited access to early learning and cognitive development; only a third (34 percent) of children aged three to four attend early childhood care and education (ECCE).

This chapter presents the status of ECD in West Bank and Gaza. The health status of children is examined through indicators (see box 14.1) of early mortality, prenatal care, and having a trained attendant at birth. Children's nutritional status is measured by stunting (height-for-age), as well as the availability of micronutrients, specifically iodine. To assess cognitive and social or emotional development, the analysis looks at the extent to which children are engaged in developmental learning activities, attendance in early childhood care and education, and whether children are violently disciplined. To better understand the context and conditions that influence ECD outcomes, the analysis also examines background factors that may be associated with ECD outcomes at the individual, household, and community levels and their relationships (see annexes 14A, 14B, and 14C for additional information on the data and these relationships). For the overall context, see box 14.2. Finally, the analysis measures the gaps and extent of inequality in ECD outcomes.

The analysis is based on the latest available data: the Palestinian Family Health Survey (PFHS) from 2006/2007. The survey was conducted in cooperation with

Figure 14.1 ECD Summary Indicators



Source: World Bank calculations based on Palestinian Family Health Survey (PFHS) 2006.
Note: ECCE = early childhood care and education; ECD = early childhood development.

Box 14.1 ECD Indicators Examined in West Bank and Gaza

Prenatal care
Trained attendant at delivery
Neonatal mortality (dying in the first month)
Infant mortality (dying in the first year)
Stunting/height-for-age
Salt iodization
Early childhood care and education
Parental development activities
Violent child discipline

the Pan-Arab Project for Family Health (PAPFAM), United Nations Children's Fund (UNICEF), and United Nations Population Fund (UNFPA) and includes the key indicators of UNICEF's Multiple Indicator Cluster Survey (MICS). The data cover the various dimensions of early childhood from before a child is born up until the age of school entry (six years in West Bank and Gaza). If more indicators were available and examined, they could provide an even richer picture of ECD in West Bank and Gaza. This chapter also refers to the summary findings of the 2010 Palestinian Family Health Survey (Palestinian Central Bureau of Statistics 2013). Although the survey final report was released in 2013, the microdata were not available at the time and therefore could not be used for this chapter.

Box 14.2 Summary of Development Indicators in West Bank and Gaza

West Bank and Gaza is a lower-middle-income economy with an estimated population of 4.0 million, of which 41 percent are under the age of 15. The average life expectancy at birth is 73 years. The primary gross enrollment rate in West Bank and Gaza was 94 percent in 2012. Overall, West Bank and Gaza ranks 110 out of 186 economies with comparable data in the 2012 Human Development Index.

Table B14.2.1 West Bank and Gaza's Socioeconomic Indicators

	1990	*2012*
Total population (millions)	2.0	4.0
% of population under 15	48	41
Life expectancy at birth (years)	68	73
School enrollment, primary (% gross)	—	94

Sources: UNDP 2014; World Development Indicators.
Note: — = not available.

Survival, Health Care, and Nutrition

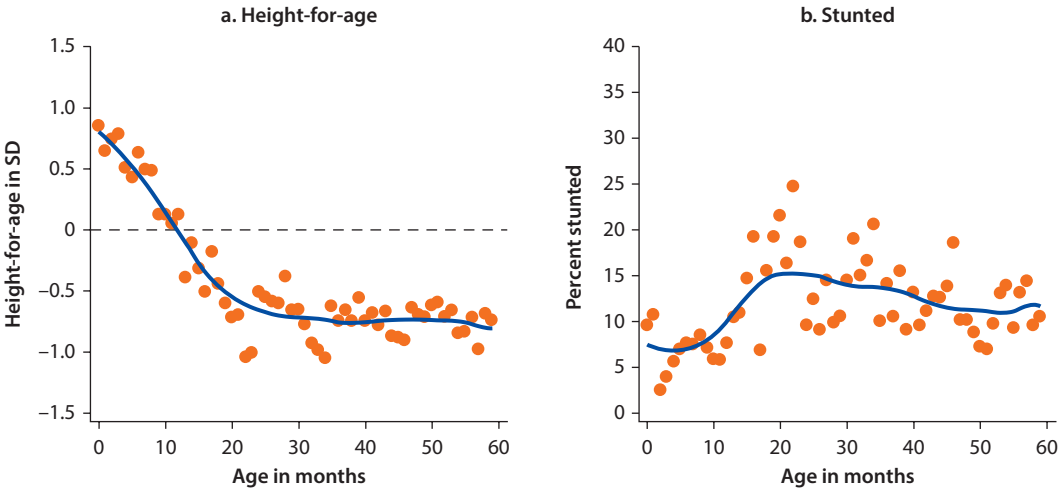
The first step in healthy ECD is simply surviving early childhood. In West Bank and Gaza, as of 2006, infant mortality, which refers to children dying before their first birthday, was 30 deaths per thousand births.[1] Most of infant mortality is composed of neonatal mortality—children dying within the first month of life. In West Bank and Gaza, 21 children out of every thousand died during their first month of life. There have been substantial improvements in mortality since 2006. In 2010, infant mortality was down to 19 deaths per thousand births, and neonatal mortality dropped to 12 deaths per thousand births (Palestinian Central Bureau of Statistics 2013). These 2010 mortality rates are below the Middle East and North Africa (MENA) regional averages (UNICEF 2014).

Addressing both early mortality and ECD begins during pregnancy and delivery. In West Bank and Gaza, 99 percent of births[2] received prenatal care, and 98 percent were attended by a health professional, as of 2006.[3] Prenatal care coverage remained high at 98 percent as of 2010, and 99 percent of births occurred with a skilled attendant (Palestinian Central Bureau of Statistics 2013).

Children in West Bank and Gaza start their lives on fairly healthy footing, in terms of nutrition measured by height-for-age; however, over the first two years of life, they experience a substantial falling off from healthy growth. As of 2006, 12 percent of children were stunted, 2 percent were underweight, and 2 percent were wasted.[4] Nutrition problems persisted as of 2010, when 11 percent of children were stunted, 4 percent underweight, and 3 percent wasted (Palestinian Central Bureau of Statistics 2013).

Figure 14.2 shows how children in West Bank and Gaza in 2006 fared compared to a healthy reference population.[5] While healthy growth in terms of weight is not an issue in West Bank and Gaza, children are faltering in their growth in terms of height. They start life with above-average height-for-age, and

Figure 14.2 Average Height-for-Age and Percentage Stunted, by Age in Months, Ages 0–59 Months



Source: World Bank calculations based on PFHS 2006.
Note: SD = standard deviation.

then by age one they are around the same height as the healthy reference population. They continue to fall off a healthy height-for-age until age 2; then for the next several years of life their growth stabilizes with children being about 0.75 standard deviations (SD) below the healthy reference median. The rate of stunting is quite low for young children but increases sharply between ages one and two and peaks around 20 months before decreasing slightly through age five.

Micronutrients such as iron, vitamin A, zinc, and iodine play an important role in both physical and cognitive development. While 87 percent of children under the age of five lived in a household with sufficiently iodized salt[6] in 2006, the remaining 13 percent who did not were at risk for impaired cognitive development. It is also concerning that salt iodization rates have fallen from 2006 (87 percent) to 2010 (77 percent) (Palestinian Central Bureau of Statistics 2013), representing a threat to the cognitive development of an increasing percentage of children.

On the positive side, there have been improvements in the coverage of other micronutrients. Vitamin A is essential for eyesight, growth, and development and also helps protect against some diseases. In 2006 in West Bank and Gaza, only 11 percent of children aged 6–59 months had received vitamin A during the six months preceding the survey (Palestinian Central Bureau of Statistics 2007). As of 2010, this rate had increased substantially to 89 percent (Palestinian Central Bureau of Statistics 2013).

Cognitive, Social, and Emotional Development

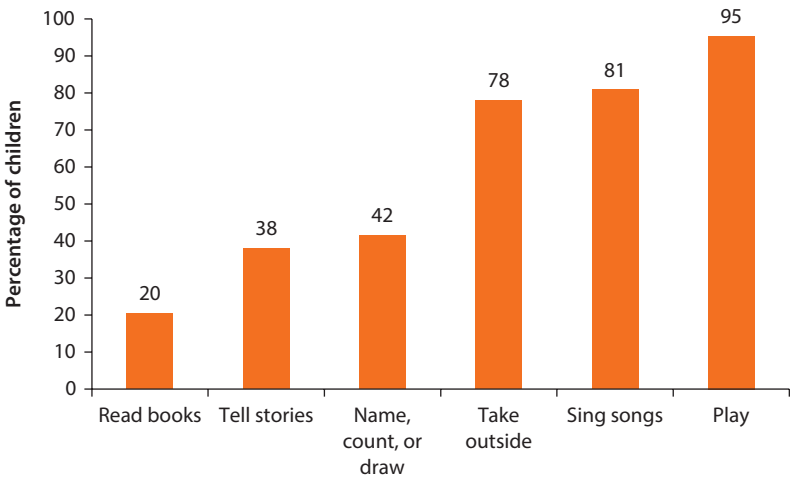
Although it has been proven that play and interaction are important components of ECD, children in West Bank and Gaza are missing out on these opportunities for psychosocial growth. In the survey, caretakers of children aged zero to four were asked whether adults in the household had engaged in any of six different

activities that support child development.[7] The results showed that in 2006, only half (47 percent) of children aged zero to four had experienced four or more development activities, and 2 percent of children experienced none of the activities. To compare with 2010, we focus on ages three to four because in 2010, this data is only available for children aged three to four. While in 2006, around two-thirds (68 percent) of children aged three to four experienced four or more development activities, in 2010 this rate had dropped to 58 percent, a substantial deterioration in children's early social, emotional, and cognitive development (Palestinian Central Bureau of Statistics 2013).

All the activities are important to social and emotional development, but reading and naming, counting, and drawing have an important educational and cognitive component. The most common activities in 2006 were playing (95 percent), singing (81 percent), and being taken outside (78 percent) (figure 14.3). The least frequently observed activity was reading books, with only 20 percent of children having books (or picture books) read to them. Naming, counting, and drawing (42 percent) and telling stories (38 percent) were also uncommon. Families in West Bank and Gaza are generally engaged socially and emotionally with their children; however, there is room for improvement in the cognitive development of children, especially in terms of reading or activities like naming, counting, and drawing.

Evidence has shown that early childhood care and education improves cognition and socioemotional development, with benefits that can last a lifetime. In West Bank and Gaza in 2006, only a third (34 percent) of children aged three to four were attending an ECCE program. ECCE attendance was much more common among four-year-olds (54 percent) than three-year-olds (15 percent). In 2006, the question was asked about all types of ECCE, including nursery care.

Figure 14.3 Percentage of Children Experiencing Development Activities, by Activity, Ages 0–4



Source: World Bank calculations based on PFHS 2006.

In 2010, a more restrictive question asked about early childhood education programs. Relatively few children (15 percent) aged three to four attend such programs in West Bank and Gaza (Palestinian Central Bureau of Statistics 2013).

Another challenge that risks hindering the healthy development of children is violent discipline. Disciplining children is an important part of child rearing. However, research has found that violent discipline negatively impacts the physical, psychological, and social development of children (UNICEF 2010). Violent child discipline[8] is common in West Bank and Gaza. According to the 2006 survey data, almost all (96 percent) of children aged two to five have experienced some form of violent discipline. Although beating with an implement (15 percent) and causing trauma (6 percent) were relatively less common, shouting/screaming at the child (93 percent), hitting with a hand (78 percent), and calling a child stupid were quite common (50 percent). There was a small decline in 2010, but rates of violent discipline remain excessive, with 92 percent of two- to four-year-olds having been violently disciplined (Palestinian Central Bureau of Statistics 2013).

Key Factors Affecting Early Childhood Development

A number of background characteristics at the child, family, and community levels affect ECD outcomes: gender, parents' education, household socioeconomic status (wealth),[9] geographic location (region or governorate), and residence (urban/rural/refugee camp). Understanding these relationships can help identify why some children have poor ECD outcomes and which children to target with policy or programmatic interventions.

Survival, Health, and Nutrition

Background characteristics have a complex relationship with infant mortality in West Bank and Gaza as of 2006. There is no clear pattern in the relationship between neonatal mortality and wealth. The rate of infant mortality is only slightly lower in the richest fifth of households than the poorest fifth of households. There are no discernable differences based on the household head's education and no large differences based on geography. In fact, when observing the models of neonatal and infant mortality based on background characteristics, there is not a statistically significant relationship.[10]

The rate of use of prenatal care is universally high at 99 percent, but shows some minor variation by wealth, education, and geography. While 99 percent of births in the richest fifth of households received prenatal care, 97 percent of births in the poorest fifth of households did so. Differences based on education are slightly larger, as 99 percent of mothers with higher education received prenatal care compared to 93 percent of illiterate mothers and 96 percent of mothers who could only read and write. Births in refugee camps actually had the highest rate of prenatal care—nearly 100 percent—while births in urban areas were at 98 percent. After taking into account other characteristics, use of prenatal care is significantly higher in the fourth and richest fifth of households compared to the poorest fifth of households. Mothers with more education

were significantly more likely to use prenatal care. Being in a rural area or refugee camp as opposed to an urban area significantly increased the chance of prenatal care, as did being in Gaza, after accounting for other characteristics.

Use of skilled birth attendants was universally at a high rate—98 percent. There are no clear differences in use of skilled delivery care based on wealth or education. The largest difference was in terms of region of residence, with rates of skilled delivery care at almost 100 percent in Gaza but 97 percent in the West Bank. After taking into account other characteristics, use of delivery care was higher in Gaza than the West Bank. Use of delivery care also significantly increased with partner's education, but there were no significant differences based on women's education.

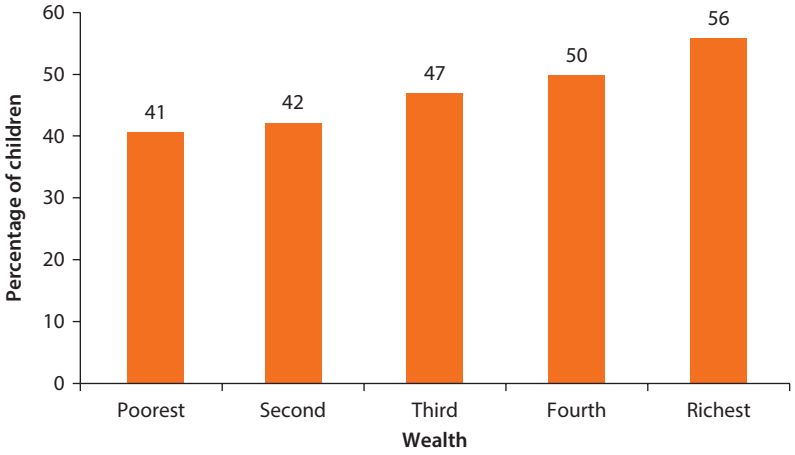
In West Bank and Gaza, stunting shows moderate differences based on wealth, suggesting that both poverty and problems in public health and nutrition quality are driving stunting. For instance, a child from the poorest fifth of households has a 16 percent chance of being stunted, while a child from the richest fifth of households has a 10 percent chance. Both have a moderately high chance of stunting, but there is a clear difference based on wealth. Similar differences are seen based on parents' education. There are notable differences in rates of stunting based on geography, with children in the West Bank at 10 percent and children in Gaza at 15 percent. There is a wide variety of stunting rates by governorate: Tulkarm has a 5 percent stunting rate, while in North Gaza the stunting rate is 33 percent. After taking into account other characteristics, children were significantly less likely to be stunted if they were living in a refugee camp, but they were more likely to be stunted if living in Gaza as compared to the West Bank. Stunting was significantly lower in every other wealth level when compared to the poorest fifth of households. Additionally, stunting was significantly lower for children who have a secondary- or highly educated mother.

Use of iodized salt was generally at a high rate—87 percent in 2006, although this has dropped somewhat in 2010. The availability of iodized salt varies little with background. Children living in refugee camps actually had a slightly higher chance of having iodized salt than children in urban areas (90 percent vs. 87 percent). The chance of a household having iodized salt was slightly higher with increased mother's and father's education. There was moderate variation in use of iodized salt based on governorate, ranging from 83 percent to 98 percent. However, overall, the variation in children's access to iodized salt based on background characteristics is not statistically significant.

Cognitive, Social, and Emotional Development

Children from the poorest two wealth levels are less likely to experience four development activities (41–42 percent), especially compared to children from the richest fifth of households, who have a 56 percent chance (figure 14.4). Parents' engagement with their young children and promotion of their early development are important components of ECD. Children should have equal parental care and development regardless of their background, but in West Bank and Gaza in 2006 there were appreciable differences in children experiencing at

Figure 14.4 Percentage of Children Aged 0–4 Experiencing Development Activities, by Wealth Level

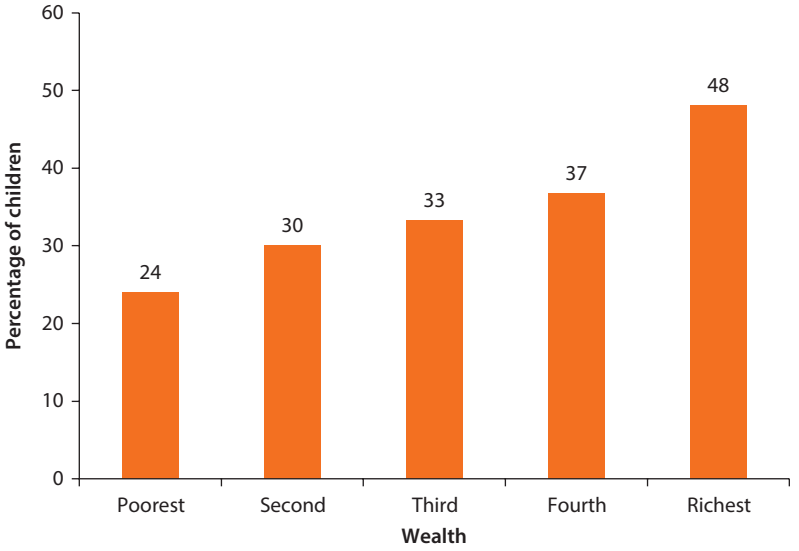


Source: World Bank calculations based on PFHS 2006.

least four development activities, based on background. The largest differences are seen in the second to third fifth of households (5 percentage points) and the fourth to richest fifth of households (6 percentage points). Similar differences are observed by parent's education. Children in refugee camps were slightly less likely to experience development activities (45 percent) compared with children in urban (47 percent) or rural (48 percent) settings. Children in Gaza were less likely to experience development activities (44 percent) than children in the West Bank (49 percent). After taking into account other characteristics, children in Gaza were less likely to experience at least four development activities as compared to those in the West Bank. The chance of experiencing four development activities increased significantly with increasing wealth, as well as with secondary- or higher-educated mothers, but not fathers.

In West Bank and Gaza, it is children from the most advantaged backgrounds who are attending ECCE, despite the fact that early childhood education has the greatest benefits for disadvantaged and vulnerable children (figure 14.5). While a three- to four-year-old child from the poorest fifth of households has a 24 percent chance of attending ECCE, a child from the richest fifth of households is twice as likely to do so (48 percent). The largest difference in rates of ECCE attendance is in comparing the fourth 20 percent of households (37 percent) to the richest (48 percent). These differences compound the deficits based on wealth in other domains of early development, such as experiencing development activities (see figure 14.4). Similar or smaller differences were observed in rates based on parental education. After taking into account other characteristics, children in rural areas were significantly more likely to attend ECCE, as were children from Gaza. ECCE attendance increases significantly with wealth, as well as with mother's (but not father's) education.

Figure 14.5 ECCE Attendance, by Wealth Level, Ages 3–4



Source: World Bank calculations based on PFHS 2006.
Note: ECCE = early childhood care and education.

Violent child discipline is widespread, with no large differences by background. The chance of being violently disciplined was slightly higher in Gaza (97 percent) than the West Bank (95 percent). This was also the only statistically significant difference after taking into account other characteristics.

Children Face Unequal Opportunities for Healthy Development

Children in West Bank and Gaza face unequal opportunities for healthy development, based on factors beyond their control. To measure the extent of inequality, the analysis calculates (a) the percentage of opportunities that needed to have been distributed differently for equality of opportunity to have occurred for each of the ECD indicators, and (b) the chance of whether these differences might have occurred by random variation (table 14.1). For prenatal care and delivery care, there is almost no inequality of opportunity, although the differences in skilled delivery care based on background are not just due to chance. There is inequality in terms of healthy physical growth; 13.4 percent of the chances of being stunted would have to be distributed differently for equality of opportunity to prevail.

There is inequality in opportunities for early cognitive development. Experiencing development activities and especially ECCE attendance show inequality of opportunity: 12.1 percent of chances to attend ECCE would need to have been distributed differently in order for children to have equality of opportunity. There is little inequality in chances of being violently disciplined. Since there were no significant differences in early deaths or access to iodized

Table 14.1 Percentage of Opportunities to Be Redistributed

	Dissimilarity index
Prenatal care	0.5
Skilled delivery	0.8*
Stunted	13.4**
Development activities	5.7**
Violent discipline	0.8
ECCE	12.1**

Source: World Bank calculations based on PFHS 2006.
Note: Significance level: * = chance < 5%, ** = chance < 1%, *** = chance < 0.1%. ECCE = early childhood care and education.

Table 14.2 Contributions of Background Characteristics to Inequality
Percentage

	Wealth	*Mother's education*	*Father's education*	*Residence*	*Region*	*Child's sex*
Prenatal care	21.5	23.9	17.5	21.6	15.6	n.a.
Skilled delivery	6.1	5.2	7.9	5.7	75.0	n.a.
Stunted	17.7	11.2	5.0	10.8	51.9	3.4
Development activities	48.2	23.7	12.1	2.8	11.9	1.2
Violent discipline	23.7	17.8	6.7	8.3	40.9	2.7
ECCE	32.0	41.8	20.9	1.5	3.7	0.1

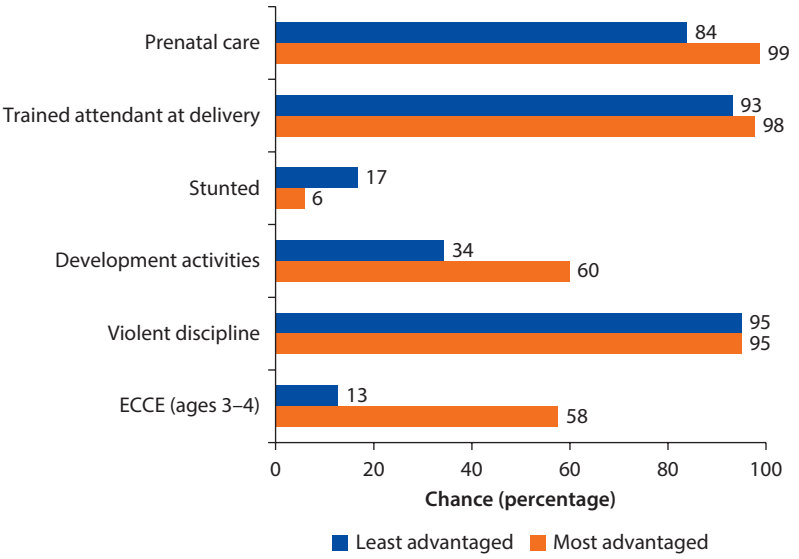
Source: World Bank calculations based on PFHS 2006.
Note: Shapley decompositions of the dissimilarity index. n.a. = not applicable. ECCE = early childhood care and education.

salt, when considering multiple characteristics, these outcomes could also be considered equitably distributed.

Wealth, mother's education, and geography make the largest contributions to children's unequal chances. Table 14.2 shows the different contributions of circumstances to inequality for different outcomes, as percentages. Wealth plays a particularly large role in development activities and ECCE, contributing between a half and a third to inequality for each of these measures. Mother's education is particularly important for ECCE and development activities, contributing substantially to inequality on these indicators. Father's education plays a small but important role in inequality for these outcomes as well. Differences in residence (urban, rural, or refugee camp) contribute little to inequality, but region does matter, especially for inequality in stunting. A child's gender contributes very little to inequality.

Children tend to be consistently advantaged or disadvantaged across a variety of dimensions of ECD and can face very different life chances based on just a few characteristics. Early childhood is when cycles of poverty and inequality are transmitted across generations. If we observe a child who lives in the poorest 20 percent of households and who has uneducated parents (a least advantaged child) and compare that child to one who has parents with higher education and is from the richest 20 percent of households (a most advantaged child), we find that they have very different chances of healthy ECD.[11] Figure 14.6 presents the chances (predicted chance) of different ECD indicators (based on the regressions)

Figure 14.6 Most Advantaged and Least Advantaged Simulations



Source: World Bank calculations based on PFHS 2006.
Note: Because the models for neonatal mortality, infant mortality, and access to iodized salt had no explanatory power, most and least advantaged simulations were not conducted. ECCE = early childhood care and education.

for these "least advantaged" and "most advantaged" individuals. Notably, the models for neonatal mortality, infant mortality, and access to iodized salt show that background characteristics are not statistically significant in explaining opportunities for ECD in these dimensions. This indicates that children do not face unequal chances of an early death or access to iodized salt based on their backgrounds. On all other indicators, the least advantaged child faces poorer ECD.

Comparing the least and most advantaged, the gap in prenatal care is 15 percentage points, and the gap in skilled delivery care is 5 percentage points. In terms of nutrition, a least advantaged child is three times as likely to be stunted—a 17 percent chance of being stunted, compared to 6 percent for a most advantaged child. There is a 26 percentage point gap in the chances of engaging in at least four development activities. The largest relative difference is in ECCE attendance, where a least advantaged child has a 13 percent chance of attending ECCE and a most advantaged child has a 58 percent chance—more than four times more likely to attend ECCE. A least advantaged child is almost equally likely to be violently disciplined as a most advantaged child, with less than a percentage point difference.

Conclusions

Despite some successes in ECD, children in West Bank and Gaza face a number of important shortfalls in their early development. Early health outcomes are good, with prenatal and skilled delivery care rates high and low mortality

(as of 2010). However, stunting remains a substantial problem. Children also face a large number of threats to their early social, emotional, and cognitive development. Violent discipline is nearly universal, but just half of children experience development activities, and only a third attend ECCE. Inequality during the early years is also an issue in West Bank and Gaza, particularly for stunting, development activities, and ECCE. Children face unequal chances for early development, based on their circumstances. More attention to address these deficits is important to ensure children can develop fully and have equal chances for healthy development in the first few years of life.

Annex 14A: The Data

The Data Set

The analysis utilizes cross-sectional data on the well-being of women and children collected in West Bank and Gaza as the Palestinian Family Health Survey (PFHS) from 2006/2007. This survey has a household questionnaire that includes important background characteristics of individuals and families. It also includes a questionnaire for ever-married women aged 15–54, which captures information on important components of ECD, such as prenatal care and skilled assistance with the delivery of children. Weight and height data are collected for children under five years of age. The survey is nationally representative and includes data that allow for an analysis of the relationship between ECD and child and household indicators within West Bank and Gaza. See Palestinian Central Bureau of Statistics (2007) for additional information in the final report on the survey.

The Sample

The 2006/2007 PFHS dataset for West Bank and Gaza sampled 11,509 households, 9,785 ever-married women aged 15–54, and 10,107 children younger than age five. The analysis in this note is weighted in order to be representative at the national level. The sample sizes reported (N) in each of the tables are based on the unweighted number of observations in the data.

Annex 14B: Indicators by Background Characteristics

Table 14B.1 Indicators by Background Characteristics

	Prenatal care—trained health professional	*Trained attendant at delivery*	*Die in first month*	*Die before first birthday*	*Stunted*	*Height-for-age (SD)*	*Iodized salt*	*ECCE (ages 3–4)*	*Development activities*	*Violent discipline*	*Percent of children (ages 0–4)*
Gender											
Male			2.2	3.0	12.3	–0.45	87.2	34.5	46.4	95.7	51.1
Female			1.9	3.0	11.3	–0.44	88.3	33.6	47.3	95.4	48.9
Wealth quintile											
Poorest	97.2	97.3	2.1	3.7	15.6	–0.70	87.6	24.0	40.6	96.7	20.0
Second	98.5	97.7	2.2	3.0	10.8	–0.49	86.9	30.1	42.2	95.4	21.0
Third	98.7	98.2	1.6	2.4	10.3	–0.44	87.2	33.3	47.0	95.1	21.8
Fourth	98.9	97.9	2.5	2.9	12.4	–0.36	88.5	36.7	49.8	96.8	19.8
Richest	99.1	97.3	1.8	2.8	9.8	–0.18	88.6	48.1	55.8	93.6	17.5
Woman's education											
Illiterate	93.0	97.9									
Read and write	96.4	96.5									
Elementary	98.2	97.5									
Preparatory	98.5	97.6									
Secondary	99.2	97.9									
Intermediate	99.1	97.9									
Higher education	99.3	98.6									
Partner's education											
Illiterate	94.6	94.2									
Read and write	97.5	97.2									

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Table 14B.1 Indicators by Background Characteristics *(continued)*

	Prenatal care—trained health professional	*Trained attendant at delivery*	*Die in first month*	*Die before first birthday*	*Stunted*	*Height-for-age (SD)*	*Iodized salt*	*ECCE (ages 3–4)*	*Development activities*	*Violent discipline*	*Percent of children (ages 0–4)*
Elementary	98.2	97.7									
Preparatory	98.5	97.6									
Secondary	99.2	97.4									
Intermediate	99.3	98.1									
Higher education	98.7	98.6									
Missing/absent/DK	95.9	100.0									
Household head's education											
Illiterate			2.1	3.1							
Primary			1.8	2.8							
Secondary +			2.1	3.0							
Mother's education											
Illiterate or Read/write					15.9	–0.66	87.8	19.7	38.4	95.2	6.9
Basic					12.1	–0.49	87.3	30.1	44.9	95.8	57.1
Secondary/diploma					11.2	–0.40	88.0	42.1	50.6	95.2	27.6
Higher					7.8	–0.05	89.3	51.8	54.2	96.7	8.0
Missing/absent/DK					21.8	–0.72	97.3	33.3	51.9	81.1	0.4
Father's education											
Illiterate or Read/write					14.1	–0.72	86.3	24.3	38.9	96.9	8.8
Basic					11.9	–0.48	86.8	30.7	45.9	95.4	51.2
Secondary/diploma					12.3	–0.38	88.4	37.4	48.5	95.1	25.3
Higher					9.7	–0.24	90.8	47.0	52.1	96.4	13.1
Missing/absent/DK					6.1	–0.42	89.9	42.3	50.6	92.3	1.5

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Table 14B.1 Indicators by Background Characteristics *(continued)*

	Prenatal care—trained health professional	*Trained attendant at delivery*	*Die in first month*	*Die before first birthday*	*Stunted*	*Height-for-age (SD)*	*Iodized salt*	*ECCE (ages 3–4)*	*Development activities*	*Violent discipline*	*Percent of children (ages 0–4)*
Residence											
Urban	98.1	97.7	2.0	3.0	12.7	–0.47	86.5	34.3	46.6	95.7	54.8
Rural	98.5	97.3	2.0	2.8	10.3	–0.42	88.9	33.3	48.2	94.9	27.2
Refugee camp	99.7	98.4	2.3	3.0	11.4	–0.41	89.7	34.5	45.3	96.0	18.0
Region											
West Bank	98.1	96.5	1.9	2.8	9.6	–0.34	88.0	32.6	48.8	94.4	58.1
Gaza	99.0	99.5	2.2	3.3	14.7	–0.58	87.3	36.2	44.0	97.1	41.9
Governorates											
Jenin	98.6	94.8			8.0	–0.42	94.4	35.4	45.8	95.1	5.5
Tubas	94.7	96.3			7.2	–0.32	94.2	30.7	43.7	86.7	1.1
Tulkarm	98.4	96.6			4.8	–0.11	88.0	45.3	55.4	92.9	3.9
Nablus	99.1	98.8			7.7	–0.34	82.7	34.4	50.7	96.9	7.8
Qalqiliya	97.3	95.3			6.2	–0.10	93.4	36.9	40.4	87.7	2.4
Salfit	99.2	93.7			11.7	–0.32	98.1	50.4	53.8	97.4	1.9
Ramallah & Al Bireh	98.0	99.1			9.3	–0.28	89.8	40.9	62.6	94.8	7.1
Jericho & Al Aghwar	99.2	99.2			14.0	–0.25	84.6	36.7	39.8	99.2	1.1
Jerusalem	97.7	90.2			12.0	–0.28	86.8	35.7	52.9	96.0	8.5
Bethlehem	98.9	99.7			5.8	–0.10	90.1	35.2	48.9	91.0	3.9
Hebron	97.6	98.0			12.6	–0.52	85.3	17.5	40.4	94.5	14.8
North Gaza	98.7	99.5			33.2	–1.32	92.1	26.5	39.2	96.2	7.8
Gaza	98.5	99.2			9.6	–0.40	83.8	41.9	42.6	98.2	15.9

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Table 14B.1 Indicators by Background Characteristics *(continued)*

	Prenatal care—trained health professional	*Trained attendant at delivery*	*Die in first month*	*Die before first birthday*	*Stunted*	*Height-for-age (SD)*	*Iodized salt*	*ECCE (ages 3–4)*	*Development activities*	*Violent discipline*	*Percent of children (ages 0–4)*
Dir Al Balah	100.0	99.6			10.5	–0.36	82.7	24.3	44.6	95.6	5.6
Khan Yunis	99.3	99.8			12.8	–0.49	88.2	44.0	48.8	96.8	7.5
Rafah	99.3	99.7			9.7	–0.32	94.9	33.9	48.0	97.2	5.1
Total	98.5	97.7	2.1	3.0	11.8	–0.44	87.7	34.1	46.8	95.5	100.0
N (observations)	6,342	6,323	8,526	8,526	9,236	9,236	12,135	3,952	10,105	2,796	

Source: World Bank calculations based on PFHS 2006.

Note: Data by governorate for neonatal and infant mortality, ECCE, and child labor is omitted because of small sample size or low rates. Other blank cells indicate not applicable or not available. DK = do not know; ECCE = early childhood care and education; SD = standard deviation.

Annex 14C: Relationship between ECD Indicators and Background, When Accounting for Multiple Characteristics

Table 14C.1 Relationship between ECD Indicators and Multiple Background Characteristics

	Prenatal	*Delivery*	*Iodized salt*	*ECCE*	*Stunted*	*Neonatal mortality*	*Infant mortality*	*Development activities*	*Violent discipline*
Female									
Residence—compared to urban									
Rural	+			+					
Refugee camp	+		+		–				
Gaza—compared to West Bank	+	+		+	+			–	+
Wealth—20% of households—compared to poorest									
Second quintile				+	–				
Third quintile				+	–	–		+	
Fourth quintile	+			+	–			+	
Richest quintile	+			+	–			+	
Woman's education—compared to none									
Read/write			n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Elementary			n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Preparatory	+		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Secondary	+		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Intermediate	+		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Higher education	+		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Partner's education—compared to none									
Read/write			n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Elementary		+	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Preparatory		+	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Secondary			n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Intermediate		+	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Higher education		+	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Missing/absent/DK		+	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Mother's education—compared to none									
Basic	n.a.	n.a.		+		n.a.	n.a.		
Secondary/diploma	n.a.	n.a.		+	–	n.a.	n.a.	+	
Higher education	n.a.	n.a.		+	–	n.a.	n.a.	+	
Missing/DK	n.a.	n.a.				n.a.	n.a.		–
Father's education—compared to none									
Basic	n.a.	n.a.				n.a.	n.a.		
Secondary/diploma	n.a.	n.a.				n.a.	n.a.		
Higher education	n.a.	n.a.	+			n.a.	n.a.		
Missing/DK	n.a.	n.a.			–	n.a.	n.a.		
Household head's education—compared to none									
Primary	n.a.	n.a.	n.a.	n.a.	n.a.			n.a.	n.a.
Secondary +	n.a.	n.a.	n.a.	n.a.	n.a.			n.a.	n.a.

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Table 14C.1 Relationship between ECD Indicators and Multiple Background Characteristics *(continued)*

	Prenatal	*Delivery*	*Iodized salt*	*ECCE*	*Stunted*	*Neonatal mortality*	*Infant mortality*	*Development activities*	*Violent discipline*
P-value (model)	0.000	0.000	0.238	0.000	0.000	0.424	0.724	0.000	0.012
Observations (N)	6,342	6,216	12,123	3,947	9,227	8,487	8,484	10,095	2,794
Pseudo R-squared	0.067	0.065	0.006	0.037	0.020	0.004	0.004	0.013	0.026

Source: World Bank calculations based on PFHS 2006.
Note: Blank cells indicate no statistically significant relationship. DK = do not know; ECCE = early childhood care and education; ECD = early childhood development; n.a. = not applicable or not available.

Notes

1. Both infant and neonatal mortality rates are calculated based on deaths in the 12–59 months preceding the survey.
2. The West Bank and Gaza 2006 PFHS asks about prenatal care for the most recent live birth in the past five years only. Since live births are likely to be associated with prenatal care, the percentage of births not receiving prenatal care is likely to be an underestimate of the percentage of pregnancies not receiving prenatal care.
3. Either a doctor or a nurse/midwife.
4. While previous reports (World Bank 2011) have suggested that West Bank and Gaza has some of the best child nutrition outcomes in the world, the World Bank (2011) report used different, older data for comparison. A stunting rate of 12 percent, although good for the region and given West Bank and Gaza's level of income, is still a substantial shortfall in children's development that must be addressed.
5. The units for height-for-age show, on average, how children in West Bank and Gaza are different from the reference population in terms of standard deviations.
6. More than 15 ppm of iodine in the salt
7. The six activities are (1) read books or look at picture books with the child; (2) tell stories to the child; (3) sing songs with the child; (4) take the child outside the home, compound, yard, or enclosure; (5) play with the child; and (6) spend time with the child naming, counting, and/or drawing things.
8. Per the MICS definitions, violent child discipline is based on discipline by anyone in the household within the last month, and includes psychological aggression (shouted, yelled, or screamed at the child; called the child dumb, lazy, or another name like that); physical punishment (shook the child; spanked, hit, or slapped the child on the bottom with a bare hand; hit the child on the bottom or elsewhere on the body with something like a belt, hairbrush, stick, or other hard object; hit or slapped the child on the hand, arm, or leg); and severe physical punishment (hit or slapped the child on the face, head, or ears; beat the child with an implement; hit over and over as hard as one could).
9. Wealth is defined in terms of which 20 percent of households a child falls into, based on an asset (wealth) index of durable goods.
10. Throughout, we use a 5 percent level of significance.
11. Since there was no clear systematic component with geographic differences, urban/rural/refugee camp, or West Bank versus Gaza, we do not incorporate a geographic component into our simulations; simulations are for a reference category of an urban child living in the West Bank.

References

Palestinian Central Bureau of Statistics. 2007. *Palestinian Family Health Survey 2006: Final Report*. Ramallah, Palestine.

———. 2013. *Final Report of the Palestinian Family Survey 2010*. Ramallah, Palestine.

UNDP (United Nations Development Programme). 2014. "Human Development Index." (accessed April 23, 2014) https://data.undp.org/dataset/Table-2-Human-Development-Index-trends/efc4-gjvq.

UNICEF (United Nations Children's Fund). 2010. *Child Disciplinary Practices at Home: Evidence from a Range of Low- and Middle-Income Countries*. New York: UNICEF.

———. 2014. *The State of the World's Children 2014 in Numbers: Every Child Counts: Revealing Disparities, Advancing Children's Rights*. New York: UNICEF.

World Bank. 2011. *Coping with Conflict? Poverty and Inclusion in the West Bank and Gaza*. Washington, DC: World Bank.

World Development Indicators (database). World Bank, Washington, DC. http://data.worldbank.org/data-catalog/world-development-indicators.