

EXAMINATION OF ANEMIA AMONG YOUNG WOMEN IN 34 DHS COUNTRIES: PREVALENCE BY AGE, RESIDENCE, AND HOUSEHOLD WEALTH¹

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BACKGROUND & PURPOSE

Anemia is a global public health problem that affects maternal and infant mortality as well as human capital development. The aim of the current research is to assess the extent of anemia in a critical age group: adolescents and young adults ages 15 to 24.

METHODS

The data are from 34 Demographic and Health Surveys and are used to describe the prevalence of anemia among pregnant and non-pregnant women by age, rural/urban residence and household wealth. We created two dichotomous variables where “0” denotes no anemia and “1” any anemia and, secondly, where “0” denotes no anemia and mild anemia and “1” denotes moderate or severe anemia based on the DHS definition.

FINDINGS

The prevalence of anemia among young women ranges from 15% to over 50%. African countries show the highest prevalence of anemia; Benin, Ghana and Mali have over 60% anemia prevalence. Moreover, the prevalence of moderate to severe anemia is particularly high in African countries, over 20% in Ghana and Guinea. Our results show that anemia is a public health concern for adolescents and young adult females in all 34 countries we analyzed.

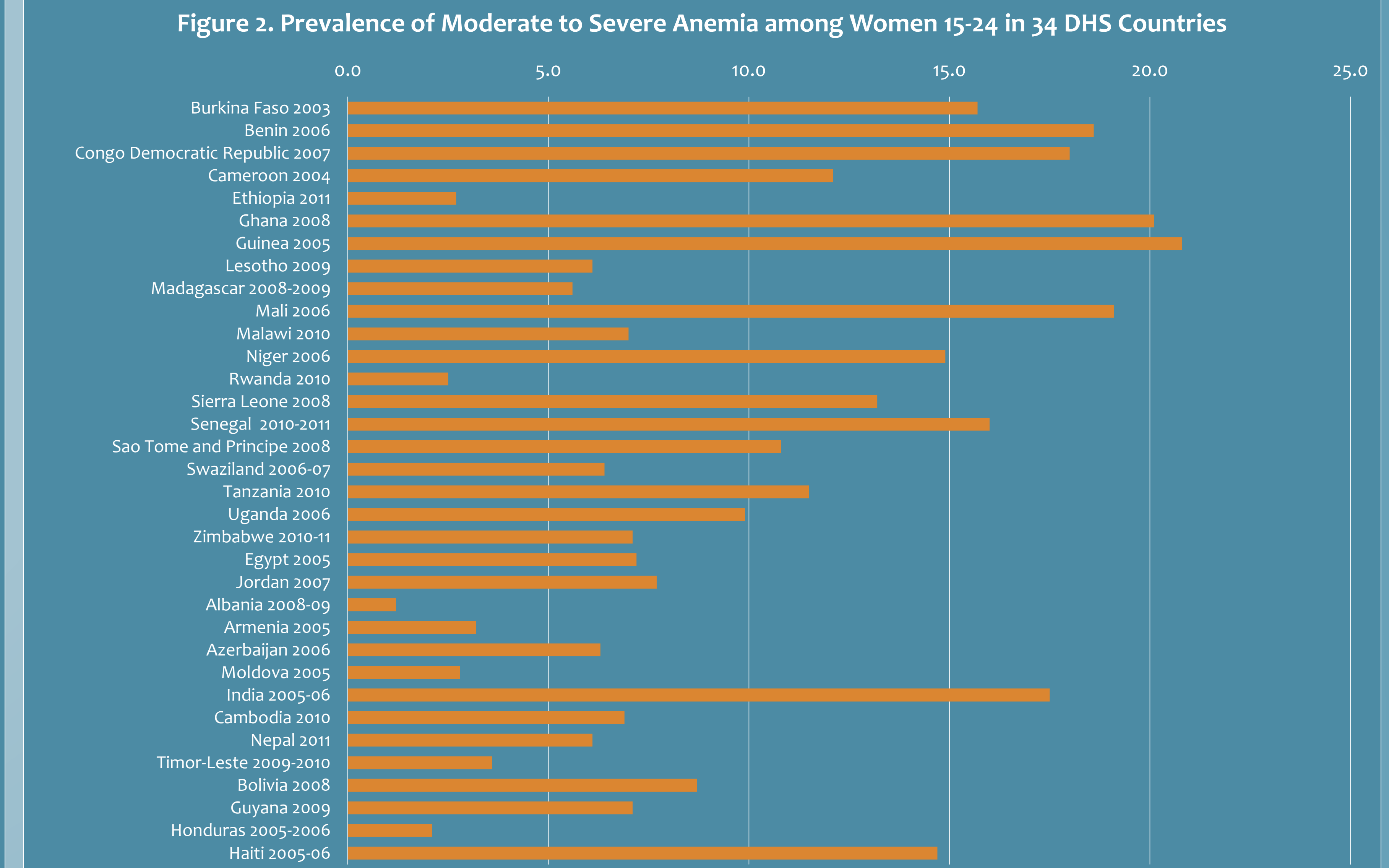


Table 1. Prevalence of Anemia among Youth by Age, Residence and Household Wealth (%)

Country and Year	Total	Age		Residence		Wealth Quartile (I=Low)				
		15-19	20-24	Rural	Urban	I	II	III	IV	V
a. Sub-Saharan African Countries										
Burkina Faso 2003	53.5	51.9	55.7	54.6	50.4	57.6	52.0	53.4	58.6	49.7
Benin 2006	61.2	59.2	63.1	61.2	61.1	64.1	61.0	61.1	61.1	59.9
Congo Democratic Republic 2007	49.7	48.7	50.6	51.2	48.0	47.3	57.8	48.8	42.8	52.2
Cameroon 2004	44.7	45.6	43.7	41.3	47.3	42.6	42.0	44.0	45.6	47.4
Ethiopia 2011	13.7	13.4	14.1	15.4	9.1	17.1	15.8	15.4	13.0	9.9
Ghana 2008	61.5	62.9	59.9	63.8	59.3	62.3	63.7	61.9	63.3	56.9
Guinea 2005	53.2	51.0	56.5	56.2	48.6	61.7	56.3	53.9	46.6	51.3
Lesotho 2009	24.5	21.3	28.1	23.7	26.8	18.9	20.2	23.9	26.5	30.1
Madagascar 2008-2009	35.6	35.1	36.3	36.9	29.9	45.9	40.8	35.2	28.4	30.5
Mali 2006	60.5	59.9	61.3	64.1	55.3	63.6	63.6	64.8	61.1	54.3
Malawi 2010	28.4	28.8	28.0	30.0	21.9	34.1	27.4	30.7	29.2	23.0
Niger 2006	45.7	46.7	44.7	47.8	38.5	46.7	48.5	52.8	43.3	39.0
Rwanda 2010	15.6	15.0	16.2	15.5	15.9	16.3	16.5	15.2	15.1	15.0
Sierra Leone 2008	47.6	50.6	44.8	45.6	50.4	47.0	42.7	45.9	49.4	50.7
Senegal 2010-2011	57.3	55.5	59.3	54.8	59.8	57.4	56.5	57.0	57.1	58.3
Sao Tome and Principe 2008	49.5	51.4	47.2	48.0	50.7	54.8	54.2	49.4	48.4	43.0
Swaziland 2006-07	29.2	28.3	30.4	28.1	33.0	24.3	25.2	31.9	33.0	29.7
Tanzania 2010	41.4	42.2	40.5	40.0	44.7	42.8	40.4	38.6	40.6	44.1
Uganda 2006	39.6	36.9	42.6	41.2	32.4	48.7	42.2	41.8	40.4	30.9
Zimbabwe 2010-11	27.1	25.7	28.5	24.7	30.9	24.1	26.3	24.3	32.5	26.9
b. North African and Middle Eastern Countries										
Egypt 2005	41.5	44.9	40.5	42.4	39.7	43.2	40.2	43.2	41.5	38.5
Jordan 2007	39.9	38.3	40.2	35.4	40.7	38.9	42.4	42.8	32.6	36.6
c. West Asian and European Countries										
Albania 2008-09	16.3	17.9	13.9	18.7	13.0	18.1	19.5	18.5	14.1	10.9
Armenia 2005	22.1	21.4	22.9	21.2	22.7	23.4	22.2	17.1	25.2	22.9
Azerbaijan 2006	33.4	30.5	36.6	35.2	31.9	36.6	40.9	31.1	28.5	30.2
Moldova 2005	24.8	23.9	26.0	25.5	23.8	27.7	25.4	24.0	25.7	22.1
d. Asian and South East Asian Countries										
India 2005-06	56.1	55.7	56.6	58.1	51.9	65.2	60.4	56.4	53.6	46.9
Cambodia 2010	45.5	47.8	42.8	48.2	36.6	57.8	47.2	51.7	42.8	34.7
Nepal 2011	37.7	38.6	36.8	39.3	27.7	35.5	36.4	41.2	38.5	36.3
Timor-Leste 2009-2010	21.1	21.5	20.7	21.4	20.4	20.0	21.7	20.8	19.3	23.8
e. Latin American Countries										
Bolivia 2008	37.7	37.7	37.7	41.8	35.8	42.9	42.9	39.3	36.9	30.2
Guyana 2009	34.2	34.1	34.4	34.1	34.6	40.9	36.0	32.5	35.1	27.7
Honduras 2005-2006	17.1	16.8	17.5	18.0	16.4	18.8	17.1	16.9	16.9	16.5
Haiti 2005-06	47.9	48.7	46.9	41.9	53.8	36.0	38.8	50.1	51.9	53.7

Table 2. Prevalence of Moderate to Severe Anemia among Youth by Age, Residence and Household Wealth (%)

Country and Year	Total	Age		Residence		Wealth Quartile (I=Low)				
		15-19	20-24	Rural	Urban	I	II	III	IV	V
a. Sub-Saharan African Countries										
Burkina Faso 2003	15.7	14.3	17.6	16.1	14.6	18.3	17.1	13.3	20.5	12.9
Benin 2006	18.6	16.7	20.4	20.1	16.6	19.9	20.8	19.8	18.6	15.6
Congo Democratic Republic 2007	18.0	16.8	19.0	21.2	14.4	20.6	22.9	21.8	10.0	16.0
Cameroon 2004	12.1	10.9	13.4	12.3	11.9	12.5	12.7	12.1	12.0	11.5
Ethiopia 2011	2.7	2.6	3.0	3.1	1.6	4.5	2.9	3.2	2.3	1.7
Ghana 2008	20.1	19.3	20.9	21.4	18.7	24.0	18.9	18.8	22.8	16.8
Guinea 2005	20.8	21.5	19.7	24.1	15.6	27.3	24.3	23.9	15.0	17.3
Lesotho 2009	6.1	4.2	8.2	6.1	6.1	4.6	4.4	4.6	7.0	8.6
Madagascar 2008-2009	5.6	5.0	6.3	5.5	5.7	6.2	7.4	4.8	4.9	4.9
Mali 2006	19.1	16.7	21.8	24.6	10.8	26.1	23.3	21.6	22.4	8.9
Malawi 2010	7.0	6.0	8.1	7.2	6.1	8.1	7.2	8.4	6.8	5.2
Niger 2006	14.9	16.7	13.1	15.6	12.2	14.5	16.7	17.5	14.6	11.7
Rwanda 2010	2.5	2.2	2.7	2.3	3.3	3.6	1.9	2.9	1.6	2.6
Sierra Leone 2008	13.2	14.2	12.2	13.1	13.3	15.1	9.5	11.9	17.1	11.8
Senegal 2010-2011	16.0	15.6	16.4	17.5	14.5	19.1	21.4	14.3	15.2	12.5
Sao Tome and Principe 2008	10.8	9.3	12.6	8.1	13.0	15.7	12.8	15.2	7.5	5.6
Swaziland 2006-07	6.4	6.3	6.4	5.8	8.5	4.8	6.1	7.9	7.5	5.2
Tanzania 2010	11.5	10.1	13.2	10.4	14.2	10.6	11.3	10.4	11.2	13.3
Uganda 2006	9.9	8.6	11.3	10.5	7.4	10.9	11.6	10.2	12.7	6.3
Zimbabwe 2010-11	7.1	7.1	7.2	5.9	9.2	6.1	5.6	5.9	9.5	7.7
b. North African and Middle Eastern Countries										
Egypt 2005	7.2	8.6	6.8	8.2	5.1	8.6	7.1	8.7	5.5	5.3
Jordan 2007	7.7	6.7	7.9	5.8	8.0	8.9	8.7	7.9	6.2	0.5
c. West Asian and European Countries										
Albania 2008-09	1.2	1.0	1.5	1.5	0.7	1.4	1.9	0.9	1.2	0.4
Armenia 2005	3.2	4.0	2.4	3.5	3.1	5.8	2.8	1.5	2.1	4.1
Azerbaijan 2006	6.3	5.8	7.0	6.4	6.3	7.6	7.4	6.0	6.5	4.5
Moldova 2005	2.8	2.2	3.5	3.4	1.9	2.7	3.3	3.4	2.2	2.3
d. Asian and South East Asian Countries										
India 2005-06	17.5	16.6	18.4	18.1	16.2	21.5	19.4	18.4	16.0	12.8
Cambodia 2010	6.9	7.3	6.4	7.6	4.5	9.9	7.0	8.5	6.5	4.1
Nepal 2011	6.1	6.1	6.2	6.4	4.4	5.5	7.3	7.3	5.3	5.2
Timor-Leste 2009-2010	3.6	2.5	5.0	3.1	4.8	2.1	3.7	2.7	3.2	5.8
e. Latin American Countries										
Bolivia 2008	8.7	7.8	9.8	9.9	8.1	10.8	9.3	9.5	10.1	5.0
Guyana 2009	7.1	7.9	6.0	7.0	7.4	10.7	5.2	8.8	6.8	4.4
Honduras 2005-2006	2.1	2.0	2.3	2.3	1.9	2.6	2.6	2.2	1.7	1.8
Haiti 2005-06	14.7	14.8	14.5	11.4	17.9	12.0	9.0	14.1	18.7	16.0

CONCLUSIONS

- The high prevalence of anemia among youth is alarming.
- Considering the importance of the adolescent and young adult years, when human capital development is consolidated and family formation begins, these findings call for interventions to redress the problem of anemia.

ACKNOWLEDGEMENTS

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