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Subject: Zimbabwe 2015DHS

Posted by [Tawo](#) on Thu, 15 Oct 2020 09:26:38 GMT

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I am writing an article on the effect of a child's living arrangement on education attainment, focusing on a sample of children living without their biological mothers whose ages range between 7-14 years.

I am using Zimbabwe 2015DHS data and my worry is the huge discrepancy in the percentage of children living without mothers when comparing results from the Birth record files and Personal Record files. From the birth record file, using variable b9, I got 23% of children living without mothers, by using the Personal record and the line for child mother, I got 39% of children living without mothers. the percentage for children whose mother is dead is 8%. Now I failed to find a plausible explanation for the huge discrepancy between the BR and PR files.

Your assistance is greatly appreciated.

Tawo

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Subject: Re: Zimbabwe 2015DHS

Posted by [Bridgette-DHS](#) on Thu, 15 Oct 2020 12:54:39 GMT

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Following is a response from DHS Research & Data Analysis Director, Tom Pullum:

This is an interesting observation. I checked the data and see (from hv111 in the PR file) that almost 9% of the children age 7-14 have lost their mother. Those children will not show up in a birth history, because their mothers will not be in the survey. However, orphanhood alone will not account for all of the discrepancy. It is possible that the effect of a maternal death is magnified, because when a mother dies, ALL of her birth history is lost. If she had any children in that age range, her mean number in the age range would be greater than one. There are some paradoxes when you shift between (a) mothers as the units of analysis and (b) children as the units of analysis. I believe this discrepancy is a result of how the children in the household survey and the children in the birth histories are sampled and is not a data quality issue. I may look into it further but can't suggest more at this time.

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Subject: Re: Zimbabwe 2015DHS

Posted by [Tawo](#) on Fri, 16 Oct 2020 03:56:24 GMT

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Dear Bridgette-DHS

Thank you for your prompt reply and for providing some clues on what might explain this huge

discrepancy. However, under your reply, I checked data for Tanzania and Malawi using 2015-2016DHS to verify if they exhibit the same trend as Zimbabwe. Restricting the sample size to 7 - 14 years and using the same command, for BR file I checked with variable b9 "Child lives with whom" and on PR file I checked with mother's line number HV112 "mother not in the household". I also calculated weighted means for both countries.

For Tanzania the gap between BR and PR results for children living without mother is not so big, (BR file=19%; PR file=28%; and maternal death=3.5 %.) However, for Malawi, the difference in the percentage of children living without biological is quite huge like for Zimbabwe. BR file=12%; PR file=29%; and maternal death=5%

I also did a double-check on Zimbabwe using 2010 data and the trend was the same. Children living without biological mother from BR file=20%; PR file=41%; and maternal death=13%.

Regards,

Tawo

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Subject: Re: Zimbabwe 2015DHS  
Posted by [Bridgette-DHS](#) on Fri, 16 Oct 2020 13:57:10 GMT  
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Following is a response from DHS Research & Data Analysis Director, Tom Pullum:

Within DHS we have had some discussion of this inconsistency between the two variables that describe coresidence with the mother, hv112 in the PR file and b9 in the KR and BR files for a child age X.

There are several potential factors, including the following (not necessarily in order of importance): (1) survival of the mothers during the past X years; (2) the cutoff at age 50 of mothers who contribute to the BR file; the omission in the PR, KR, and BR files of mothers who are outside the household population, e.g. working abroad; (4) the omission in the PR file of children who are outside the household population. Other factors may be involved too.

This is indeed an interesting observation. It calls attention to ways in which the KR and BR files systematically omit children whose mothers, at the time of the survey, were not alive or were not in the household population or were not in the age range 15-49. This bias becomes more serious for older children but is probably negligible for children age 0-4, who are used for the MCH indicators.

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Subject: Re: Zimbabwe 2015DHS  
Posted by [Tawo](#) on Fri, 16 Oct 2020 15:24:31 GMT  
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To Tom Pullum, Bridgette, and DHS team.

Thank you for the explanation and clarification on the inconsistency between the two variables that describe coresidence with the mother. My understanding is now clear on the relationship between PR, KR, and BR files.

Regards,

Tawo.

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