
Subject: Neonatal death highest Proportion in U5CM. However, a Rare Statistical Event

Posted by shujaat.smc@gmail.com on Sat, 16 Jan 2021 08:04:53 GMT

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Dear DHS Representative,

I have come across the limitation of estimating the NMR through survey data that "The survey data on neonatal mortality may be affected by limited sample size because even in high mortality settings, neonatal deaths are a rare (statistical) event, (Hill and Choi 2006)."

My Mind is not accepting this statement due to the following reasons;

1. I am living in a country (Pakistan) that has the highest NMR across the globe.
2. My country does not have CRVS across its region.
3. How the science of statistics comes to the conclusion that due to "limited sample size" in a "high mortality setting, neonatal death is rare statistical event."

Quest1: How it can be proved that this statement holds true for my country and other regions with high NMR?

Quest2: What is the statistical test to prove that due to the limited sample size in a nationwide household survey like DHS the sample size was small?

Quest3: Does a rare statistical event creates survivor bias. (I am asking this because the author has mentioned this limitation of the rare statistical event in the paragraph on survivor bias)

Looking forward to your reply.

Best Regards

Dr. Hussain

Subject: Re: Neonatal death highest Proportion in U5CM. However, a Rare Statistical Event

Posted by [Bridgette-DHS](#) on Tue, 19 Jan 2021 19:00:12 GMT

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

I am familiar with that paper. The caveat about "rare events" really refers to much different

settings, such as countries in Europe. In almost all countries where DHS works, neonatal deaths are NOT rare and the NNMR is important for analysis. The reference to survival bias is also not applicable to Pakistan or other DHS countries--at least, not compared to other potential biases.

A more serious issue, I believe, is that when neonatal mortality is high, there is a risk that early neonatal deaths will be confounded with stillbirths. That's one of the many reasons why in Phase 8 we are shifting to pregnancy histories--to get better measurement of stillbirths as well as early neonatal deaths.

Subject: Re: Neonatal death highest Proportion in U5CM. However, a Rare Statistical Event

Posted by shujaat.smc@gmail.com on Wed, 20 Jan 2021 13:03:36 GMT

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Dear Tom Pullum,

Thanks for your reply, this prevents me from writing a wrong statement in my scientific paper.

Best Regards

Dr. Hussain
