Subject: Determining date/date of death of child in KR/BR file
Posted by paull on Tue, 05 Dec 2023 17:41:05 GMT
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Hi all,

I do understand that the day of death of a child variable in the KR/BR files, b6 is such that the first number on the left if it's 1 represent day of death, 2 = month of death and 3 = year. Thu, I am able to determine the number of deaths up to 30 days by day of death. However, I want to determine the days of death (how old was the child when it died in actual days rather than computed months) for the period beyond the first 30 days. Is there a way I can determine this from the DHS variables (v008, b19, b6,b1, b2, b17,etc)? I want the actual day of death, or even better the date of death.

Thank you,
Paul

Subject: Re: Determining date/date of death of child in KR/BR file
Posted by Janet-DHS on Wed, 06 Dec 2023 22:04:17 GMT
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Thank you for submitting your question. Could you please provide some more detailed information so we can better advise you?

Can you let us know:
• Which survey you are using (Include country name and year)?
• Which data files you are referring to?
• Which software you are using (Stata, SPSS, R, etc.)?

If you are trying to match a Table in a final report, please also indicate which table and which estimate you are trying to match.

Subject: Re: Determining date/date of death of child in KR/BR file
Posted by paull on Thu, 07 Dec 2023 00:26:54 GMT
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Dear Jane,
Thank you for getting back to me.

I am using the latest available DHS datasets from Uganda 2016, Kenya 2022, Tanzania 2022, Burundi 2016/2017, Rwanda 2019/2020 and Ethiopia 2019. I am analysing the effect of extreme weather events on neonatal, infant and under-fives mortality in the East African Region, focusing on the five years preceding the DHS. Thus, I am using the KR file. I intend to use the time-stratified case-crossover design with distributed lag nonlinear models, with the day of death

(from the date of death) as the case day and other days as control days.

I can determine the date of death for newborns who die within a month by adding their day of death to the date of birth (computed from b1, b17 and b2 as instructed in the DHS guide). However, I cannot do the same for children who die after 1 month, as per the DHS guide because these are computed in completed months or years. I could use months rather than days for the analysis of infant mortality but not sure what would happen for those who die aged 2 years and above as the DHS states only completed years are given. Furthermore, using months rather than days won't be robust because I am looking at the transient effects of extreme weather events on mortality.
Is there a way I can determine the actual date of death (or completed days at death) for all children recoded b5 = 0 in the DHS? Do recodes 202 or 211 in b6 mean anything other than giving us the months of death only without days? From the DHS guide, I would assume those are deaths at 02 and 11 months respectively without days kindly guide me if I am wrong!
I am okay with both R and Stata.

I hope this is a clearer.

Kind regards,
Paul

Subject: Re: Determining date/date of death of child in KR/BR file
Posted by Janet-DHS on Fri, 08 Dec 2023 21:20:26 GMT
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Following is a response from DHS staff member, Tom Pullum:

You are right, DHS surveys have complete information on date of birth (day of birth is relatively recent) but they do not provide date of death. Age at death (b6) is given in days for the first month, then in completed months for the rest of the first two years, and then in completed years. This limitation affects the construction of the standard under-5 death rates. I hope you can find some way around it, perhaps with a probabilistic allocation within an interval, at least up to the 2nd birthday.

Your research has another potential limitation--sample size. The sampling error in your estimates will depend on the number of deaths, as well as the number of births. I suggest that you look at the number of births and deaths in the vicinity of one of your weather events and examine the statistical power to detect an effect.

Another possibility would be to focus on neonatal deaths. You do have the day for them and they are a high proportion of under-5 deaths. Relatively few under-5 deaths occur at 2, 3, and 4 completed years of age.

If the mother, as well as the child, died, the birth and death will not appear in the data.

Good luck with this innovative use of DHS data.