
Subject: Child age variable

Posted by [wojjae1995](#) on Tue, 14 Feb 2023 23:01:55 GMT

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I found that there are several variables that calculate children's age. I am currently working with the hc1 variable in the PR data and the b19 variable in the KR data.

I was wondering which variable is more accurate for analysis.

From this website (<https://dhsprogram.com/data/calculating-the-age-of-children.cfm>) I think it says that b19 is the age calculated when the interview was held and hc1 is the age calculated when biomarkers were measured.

I am trying to do analysis regarding malaria in children; would that mean hc1 is more accurate to use?

I am asking because there are quite a lot disconcordance between hc1 & b19; from my crude coding I did below after merging the PR data with KR data

```
PRtemp =subset(PRdata, select=c(v001, v002, v003, hc1), 'NA'= TRUE)
```

```
KRdata <- merge(KRdata, PRtemp, by=c("v001", "v002", "v003"))
```

```
KRdata <- KRdata%>%
```

```
  mutate(concordance = case_when(
```

```
    b19 == hc1 ~ 1,
```

```
    !(b19 == hc1) ~ 0))
```

```
KRsvy <- svydesign(id = KRdata$v021, strata=KRdata$v022, weights = KRdata$v005/1000000, data=KRdata)
```

```
svymean(~concordance, KRsvy, na.rm=TRUE)
```

```
svytable(~concordance, KRsvy)
```

```
prop.table(svytable(~concordance,KRsvy),)
```

I get 3138.414 for 1, 2636.717 for 0 so nearly 45% of the data have disconcordance in their age data.

Please help me in identifying which variable I should use regarding children age. Thank you!

Subject: Re: Child age variable

Posted by [wojjae1995](#) on Tue, 14 Feb 2023 23:10:08 GMT

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In similar note, I want to also ask which variable is better to use for the sex of child;

there is b4 from KR data and hv104 from PR data

I may have forgotten to mention that KR data is the children data and PR data is the household member data.

Thank you!

Subject: Re: Child age variable

Posted by [Janet-DHS](#) on Wed, 15 Feb 2023 16:24:45 GMT

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Following is a response from DHS staff member, Tom Pullum:

In the PR file, every household member's age in years is given as hv105. This is the age given by the household respondent (or informant) during the household listing.

After the child's birthdate has been obtained, age is recalculated (during data processing) and in various places is given in days, months, or years. In the KR and BR files, for living children, age in years is given by b4 and it may not agree exactly with hv105. If there is a difference, b4 would be considered to be more accurate than hv105. The calculation of age in months is based on a calculation of age in days (on the day of the mother's interview). Age in days is divided by $(365.25/12) = 30.4375$, ignoring differences in the lengths of actual calendar years and calendar months. The various appearances of age are consistent, except for hv105. Thus, hc1 in the PR file, and hw1 and b19 in the KR file, will agree exactly.
