
Subject: Child age variable

Posted by [woojae1995](#) 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!
