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Subject: Kenya 2022 calendar data

Posted by [md2022](#) on Mon, 02 Oct 2023 13:01:31 GMT

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I am working with Kenya 2022 DHS calendar data and running into some issues. I am wondering if anyone else has encountered this and figured out a way to remedy it. I am trying to trim and reverse vcal\_1 and vcal\_2. This works perfectly for vcal\_1, however, when I do it for vcal\_2 the string is always much shorter and the reasons for discontinuation are not aligned with vcal\_1. I realized that it seems vcal\_2 does not have the same number of white spaces, specifically that the length of the string does not seem to match what is mentioned in v019. Has anyone had to add white spaces to their variables to make them aligned? If so, how do you determine the additional number of white spaces needed.

Photos attached to hopefully provide more clarity. Vcal\_1[471] and vcal\_2[471] as well as Vcal\_1[156] and vcal\_2[156] show the original data that hasn't been cleaned and the length of vcal\_2 is clearly much shorter than vcal\_1. The other screenshot is showing the same issue with the Kenya data (I also tested this out and saw the same with Rwanda 2020 data).

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#### File Attachments

- 1) [DHS calendar data screenshot.png](#), downloaded 343 times
  - 2) [DHS calendar data screenshot\\_2.png](#), downloaded 336 times
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Subject: Re: Kenya 2022 calendar data

Posted by [Janet-DHS](#) on Fri, 06 Oct 2023 20:51:30 GMT

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

I believe the problem is that vcal\_2 is mostly blanks, including varying numbers of leading blanks and trailing blanks, and the purpose of the "trim" string commands is to remove leading and/or trailing blanks. The safest solution may be to not use the trim command on vcal\_2. With v017 and v018 (see below) you should be able to identify the columns you want to keep, such as the 60 columns before the month of interview, using the substr command. Then you can reverse those 60 columns (warning: that's risky).

Here are the relationships among mbi, cmc, col, v017, and v018, where col is the column of the vcal variables:

\* mbi: months as months before interview.  $mbi = col - v018$

\* cmc: months in century month codes.  $cmc = v017 + 80 - col$

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Subject: Re: Kenya 2022 calendar data

Posted by [md2022](#) on Mon, 16 Oct 2023 11:10:43 GMT

Hi there,

Thank you for getting back to me. If I trim and reverse vcal\_1, which seems necessary for analysis, how can I also incorporate vcal\_2 if I cannot trim the variable? I understand using v018 to understand its intended length, but it is already not aligned in the uncleaned data. Even with the raw variables vcal\_2 does not align with vcal\_1, making association difficult/impossible.

I also wanted to ask if I should be using the recode manual from DHS7 for the Kenya 2022 data for the contraceptive code - there is no recode manual for DHS8 which is Kenya's most recent.

Thank you!

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Subject: Re: Kenya 2022 calendar data  
Posted by [md2022](#) on Tue, 17 Oct 2023 11:40:21 GMT  
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Hello,

Thank you again for your support. I am going through the previous DHS calendar data and would also like to confirm the code and recodes for the Kenya DHS's (2022, 2014, 2008/09, 2003, 1998, 1993, 1989). It is a bit unclear using the recode manuals (found here: <https://dhsprogram.com/publications/publication-dhsg4-dhs-questionnaires-and-manuals.cfm>) which recodes align with which years and whether I should be using the recode manual or the questionnaire. For example, in the recodes, the implant/Norplant is coded as N (which does not exist in the questionnaire as a code) whereas in the questionnaires it is 11 (which does not exist as a code in the recode). However, when I go into the dataset (here the 2014 Kenya dataset) it says that both 'N' and '11' exist as codes and I also included '1' to make sure the 11's and 1's were not being confused in the string. I have attached a photo for reference.

It would be great to get confirmation to ensure I am not using the wrong codes for the contraceptive methods overtime.

#### File Attachments

1) [Kenya DHS 2014 Contraceptive Code.png](#), downloaded 357 times

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Subject: Re: Kenya 2022 calendar data  
Posted by [Janet-DHS](#) on Tue, 17 Oct 2023 16:29:40 GMT  
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Following is a response from DHS staff member, Tom Pullum:

The Stata lines below show how to select the columns of vcal\_1 and vcal\_2 for the 60 months

before the interview, reverse the sequence of columns, and construct pairs of corresponding columns.

Again, I advise against reversing the sequencing of the columns. The tutorials for the calendar are based on the original sequencing, which counts backwards from the month of interview. I know that's counter-intuitive (we usually think of time going from left to right), but you can get used to it. Kind of like navigating with a mirror....

Regarding the contraceptive codes, you can use the DHS-7 manual.

use "C:\Users\26216\ICF\Analysis - Shared Resources\Data\DHSdata\KEIR8BFL.DTA", clear

\* mbi: months as months before interview. mbi=col-v018

\* cmc: months in century month codes. cmc=v017+80-col

\* Reduce vcal\_1 and vcal\_2 to the 60 months before the interview

\* Solve mbi=col-v018 for col when mbi is 1, then select 60 columns, then reverse

```
gen col_1=v018+1
```

```
gen vcal_1r=substr(vcal_1,col_1,60)
```

```
replace vcal_1r=strreverse(vcal_1r)
```

```
gen vcal_2r=substr(vcal_2,col_1,60)
```

```
replace vcal_2r=strreverse(vcal_2r)
```

```
forvalues lcol=1/60 {
```

```
gen pair12_`lcol'=substr(vcal_1r,`lcol',1) + substr(vcal_2r,`lcol',1)
```

```
}
```

\* Select, for example, column 20 (in the reversed sequence)

\* All observed pairings of vcal\_1 and vcal\_2 for this column

```
tab pair12_20
```

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Subject: Re: Kenya 2022 calendar data

Posted by [md2022](#) on Wed, 18 Oct 2023 09:17:31 GMT

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Thank you for the code and suggestion of not reversing. I will also use DHS7 for the most recent Kenyan DHS. For the other survey years (1989-2014) should I also use DHS7? As the screenshot attached here shows and I mentioned earlier, it appears the codes do not align with the questionnaire or the recode manuals e.g., 11, 5, and N as the implant.

Thank you!

## File Attachments

1) [Kenya DHS 2014 Contraceptive Code.png](#), downloaded 348 times

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Subject: Re: Kenya 2022 calendar data

Posted by [Janet-DHS](#) on Mon, 23 Oct 2023 19:27:01 GMT

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Following is a response from DHS staff member, Tom Pullum and Senior DHS staff members, Trevor Croft:

The file <https://www.dhsprogram.com/data/Calendar-Tutorial/upload/Static/Calendar%20recoding.do> includes country specific recoding for the calendar variables. However, looking at that file we don't see any Kenya specific recoding. You need to look at the standard codes in the recode manual (not the questionnaire as they are recoded from the questionnaire). You don't need to go back through each prior round, just get the list from the latest recode manual.

Here is the recoding that is done:

```
{ Columns and their codes !!  
{ 1----->2-----> }  
acalstrs = "BPT0634~712LMY5~K8~9XJ? 1236~74N08FADX5~~Z?"; { questionnaire }  
vcalstrs = "BPT0123~56789WN~LC~EMS? 123456789CFADWM??K?"; { recode file }
```

If the code from the questionnaire is found in acalstrs, then the equivalent code from vcalstrs is assigned in the recode. The tilde's are place holders for codes that are no longer used.

Equivalently, here is the recoding that is done for the calendar, written in a different form:

```
recode q -> r; { Questionnaire to recode file }  
    "6" -> "1"; { 1 Pill }  
    "3" -> "2"; { 2 IUD }  
    "4" -> "3"; { 3 Injection }  
//    "0" -> "~"; { 4 Diaphragm, not used unless included in country }  
    "7" -> "5"; { 5 Condom }  
    "1" -> "6"; { 6 Female, male sterilization }  
    "2" -> "7"; { 7 Female, male sterilization }  
    "L" -> "8"; { 8 Rhythm/Periodic abstinence }  
    "M" -> "9"; { 9 Withdrawal }  
    "Y" -> "W"; { 10 Other }  
    "5" -> "N"; { 11 Norplant/implants }  
//    "0" -> "~"; { 12 Long term Abstinence - not used unless included in country }  
    "K" -> "L"; { 13 Lactational amenorrhea (LAM) }  
    "8" -> "C"; { 14 Female condom }  
//    "0" -> "~"; { 15 Foam or jelly, not used unless included in country }  
    "9" -> "E"; { 16 Emergency contraception }  
    "X" -> "M"; { 17 Other modern method }
```

```
"J" -> "S"; { 18 Standard Days (SDM) }  
// "0" -> "~"; { 19 CS methods }  
// "0" -> "~"; { 20 CS methods }  
endrecode;
```

Your comments about code 11 either do not refer to the calendar (perhaps they refer to V312?) or suggest that you are misinterpreting the calendar. Each position in the calendar is a single character. It is impossible to have code 11 in a single character.

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Subject: Re: Kenya 2022 calendar data  
Posted by [md2022](#) on Tue, 24 Oct 2023 13:34:27 GMT  
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Hi there,

Thank you for the response. I just want to confirm I am understanding correctly: should I only be using the current recode even for older calendar data? I was previously trying to match the recode to the survey of that year - e.g., use the recode manual from 2008 for a 2008 DHS survey. However, should I only be using the most recent recode (DHS7 recode manual and what is below) for all calendar survey years? This would make sense as I was exploring an older DHS (circa 2004) and saw N coded in the calendar data although N was not in the recode for that time period but I just want to confirm this is the correct interpretation.

Many thanks for your support on this!

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