

ANNEXURE ONE- Calendar used in NFHS-3

INSTRUCTIONS:

ONLY ONE CODE SHOULD APPEAR IN ANY BOX.  
FOR COLUMNS 1 AND 3, ALL MONTHS SHOULD BE FILLED IN.

INFORMATION TO BE CODED FOR EACH COLUMN

COL. 1: BIRTHS, PREGNANCIES, CONTRACEPTIVE USE

- B BIRTHS
- P PREGNANCIES
- T TERMINATIONS
- 0 NO METHOD
- 1 FEMALE STERILIZATION
- 2 MALE STERILIZATION
- 3 PILL
- 4 IUD/LOOP
- 5 INJECTABLES
- 6 IMPLANTS
- 7 CONDOM/NIROOH
- 8 FEMALE CONDOM
- 9 DIAPHRAGM
- J FOAM OR JELLY
- L RHYTHM METHOD
- M WITHDRAWAL
- X OTHER

(SPECIFY)

	1	2	3	4
12 DEC	01			01 DEC
11 NOV	02			02 NOV
10 OCT	03			03 OCT
09 SEP	04			04 SEP
08 AUG	05			05 AUG 2
07 JUL	06			06 JUL 0
06 JUN	07			07 JUN 0
05 MAY	08			08 MAY 6
04 APR	09			09 APR
03 MAR	10			10 MAR
02 FEB	11			11 FEB
01 JAN	12			12 JAN

12 DEC	13 DEC
11 NOV	14 NOV
10 OCT	15 OCT
09 SEP	16 SEP
08 AUG	17 AUG 2
07 JUL	18 JUL 0
06 JUN	19 JUN 0
05 MAY	20 MAY 5
04 APR	21 APR
03 MAR	22 MAR
02 FEB	23 FEB
01 JAN	24 JAN

12 DEC	25	25 DEC
11 NOV	26	26 NOV
10 OCT	27	27 OCT
09 SEP	28	28 SEP
08 AUG	29	29 AUG 2
07 JUL	30	30 JUL 0
06 JUN	31	31 JUN 0
05 MAY	32	32 MAY 6
04 APR	33	33 APR
03 MAR	34	34 MAR
02 FEB	35	35 FEB
01 JAN	36	36 JAN

12 DEC	37	37 DEC
11 NOV	38	38 NOV
10 OCT	39	39 OCT
09 SEP	40	40 SEP
08 AUG	41	41 AUG 2
07 JUL	42	42 JUL 0
06 JUN	43	43 JUN 0
05 MAY	44	44 MAY 3
04 APR	45	45 APR
03 MAR	46	46 MAR
02 FEB	47	47 FEB
01 JAN	48	48 JAN

12 DEC	49	49 DEC
11 NOV	50	50 NOV
10 OCT	51	51 OCT
09 SEP	52	52 SEP
08 AUG	53	53 AUG 2
07 JUL	54	54 JUL 0
06 JUN	55	55 JUN 0
05 MAY	56	56 MAY 2
04 APR	57	57 APR
03 MAR	58	58 MAR
02 FEB	59	59 FEB
01 JAN	60	60 JAN

12 DEC	61	61 DEC
11 NOV	62	62 NOV
10 OCT	63	63 OCT
09 SEP	64	64 SEP
08 AUG	65	65 AUG 2
07 JUL	66	66 JUL 0
06 JUN	67	67 JUN 0
05 MAY	68	68 MAY 1
04 APR	69	69 APR
03 MAR	70	70 MAR
02 FEB	71	71 FEB
01 JAN	72	72 JAN

## ANNEXURE TWO-

SPSS Syntax used for analysis

### Merging of HIV data file with Individual woman's file

```
GET  
FILE='D:\Data Shirish\IAIR50FL.SAV'.  
DATASET NAME DataSet1 WINDOW=FRONT.
```

```
SORT CASES BY  
CASEID (A) .
```

```
GET  
FILE='D:\Data Shirish\IAar50fl.SAV'.  
DATASET NAME DataSet2 WINDOW=FRONT.
```

Variable HIVID was renamed as CASE ID

```
SORT CASES BY  
CASEID (A) .
```

```
MATCH FILES /FILE=*  
/TABLE='D:\Data Shirish\IAar50fl.SAV'  
/BY CASEID.  
EXECUTE.
```

### Selecting cases as per the selection criteria

\* Deleting cases- women never married

```
FILTER OFF.  
USE ALL.  
SELECT IF(V513 > 0).  
EXECUTE .
```

\*Selecting cases of women who were married for less than 12 years

```
FILTER OFF.  
USE ALL.  
SELECT IF(V512 < 13).  
EXECUTE .
```

\*Selecting cases of women who were never tested for HIV before

```
FILTER OFF.  
USE ALL.  
SELECT IF(V781=0).  
EXECUTE .
```

In the all India file there were women who were not tested for HIV (24183) for many states so the value under HIV testing was missing therefore these cases were eliminated

```
FILTER OFF.  
USE ALL.  
SELECT IF(HIV03 = 0 OR HIV03 =1).  
EXECUTE .
```

### **Matching HIV Positive cases with Negative cases**

Recode for matching the cases \*\*\*\* base file is allIndia\_filtered\_unmatched.sav

RECODE

V024 (27=27) (28=28) (29=29) (33=33) (14=14) (ELSE=35) INTO StateGr .  
EXECUTE .

RECODE

V130 (1=1) (2=2) (ELSE=96) INTO ReligionGR .  
EXECUTE .

RECODE

V445

(Lowest thru 1850=1) (1851 thru 2499=2) (3000 thru Highest=3) INTO  
BMI\_Group .  
EXECUTE .

\* Identify Duplicate Cases.

SORT CASES BY V013(A) V025(A) StateGr(A) V106(A) V190(A) HIV03(D) .

MATCH FILES /FILE = \* /BY V013 V025 StateGr V106 V190

/FIRST = PrimaryFirst /LAST = PrimaryLast.

DO IF (PrimaryFirst).

COMPUTE MatchSequence = 1 - PrimaryLast.

ELSE.

COMPUTE MatchSequence = MatchSequence + 1.

END IF.

LEAVE MatchSequence.

FORMAT MatchSequence (f7).

COMPUTE InDupGrp = MatchSequence > 0.

SORT CASES InDupGrp(D).

MATCH FILES /FILE = \* /DROP = PrimaryFirst PrimaryLast InDupGrp.

VARIABLE LABELS MatchSequence 'Sequential count of matching cases' .

VARIABLE LEVEL MatchSequence (SCALE).

EXECUTE.

**After the matching was done then the number of cases were randomly selected.**

**Following is the example of the SPSS syntax for random selection of cases**

USE ALL.

do if \$casenum = 1.

compute #s\$\_1=5.

compute #s\$\_2=25.

end if.

do if #s\$\_2 > 0.

compute filter\_\$ = uniform(1)\* #s\$\_2 < #s\$\_1.

compute #s\$\_1 = #s\$\_1 - filter\_\$.

compute #s\$\_2 = #s\$\_2 - 1.

else.

compute filter\_\$ = 0.

end if.

VARIABLE LABEL filter\_\$ '5 from the first 25 cases (SAMPLE)'.

FORMAT filter\_\$(f1.0).

FILTER BY filter\_\$.

EXECUTE .

After this selection the file with HIV cases and their controls were ready for analysis

## **Analysis of Effect of HIV on the determinants of exposure to the risk of pregnancy**

```
FILE='F:\Data Shirish\NFHS_3\Final data set without religion'+  
' matching>AllIndia_complete.sav'.  
DATASET NAME DataSet1 WINDOW=FRONT.
```

```
CROSSTABS  
/TABLES=V013 V024 V025 V106 V190 BY HIV03  
/FORMAT= AVALUE TABLES  
/CELLS= COUNT  
/COUNT ROUND CELL .
```

```
DESCRIPTIVES
```

```
VARIABLES=V012  
/STATISTICS=MEAN STDDEV MIN MAX .
```

```
MEANS
```

```
TABLES=V012 BY HIV03  
/CELLS MEAN COUNT STDDEV .
```

```
COMPUTE BodyMassIndex = V445/100 .  
EXECUTE .
```

```
RECODE
```

```
BodyMassIndex  
(0 thru 18.5=1) (18.5 thru 24.99=2) (25 thru Highest=3) INTO BMI_Gr .  
EXECUTE .
```

```
CROSSTABS
```

```
/TABLES=BMI_Gr BY HIV03  
/FORMAT= AVALUE TABLES  
/STATISTIC=CHISQ  
/CELLS= COUNT  
/COUNT ROUND CELL .
```

```
EXAMINE
```

```
VARIABLES=BodyMassIndex  
/PLOT BOXPLOT STEMLEAF NPPLOT  
/COMPARE GROUP  
/STATISTICS DESCRIPTIVES EXTREME  
/CINTERVAL 95  
/MISSING LISTWISE  
/NOTOTAL.
```

```
NPAR TESTS
```

```
/M-W= BodyMassIndex BY HIV03(0 1)  
/K-S= BodyMassIndex BY HIV03(0 1)  
/MISSING ANALYSIS  
/METHOD=EXACT TIMER(5).
```

```
CROSSTABS
```

```
/TABLES=V457 BY HIV03  
/FORMAT= AVALUE TABLES  
/STATISTIC=CHISQ  
/CELLS= COUNT  
/COUNT ROUND CELL .
```

```
NPAR TESTS
```

```
/M-W= V453 BY HIV03(0 1)  
/K-S= V453 BY HIV03(0 1)  
/MISSING ANALYSIS  
/METHOD=EXACT TIMER(5).
```

```
CROSSTABS
```

```
/TABLES=HIV03 BY V501
```

```
/FORMAT= AVALUE TABLES  
/STATISTIC=CHISQ  
/CELLS= COUNT  
/COUNT ROUND CELL .
```

```
RECODE  
V201  
(0=0) (1=1) (2=2) (3 thru 8=3) INTO Total_children .  
EXECUTE .
```

```
RECODE  
V208  
(0=0) (ELSE=1) INTO birthlast5yrs_yes_no .  
EXECUTE .  
SORT CASES BY  
HIV03 (D) .
```

### **Marriage to first birth interval**

```
RECODE  
B3$01 B3$02 B3$03 B3$04 B3$05 B3$06 B3$07 B3$08 B3$09 B3$10 B3$11  
(SYSMIS=0) .  
EXECUTE .
```

```
COMPUTE one = B3$11 .  
EXECUTE .
```

```
IF (B3$07=0) two = B3$06 .  
EXECUTE .
```

```
IF (B3$06=0) three = B3$05 .  
EXECUTE .
```

```
IF (B3$05=0) four = B3$04 .  
EXECUTE .
```

```
IF (B3$04=0) five = B3$03 .  
EXECUTE .
```

```
IF (B3$03=0) six = B3$02 .  
EXECUTE .
```

```
IF (B3$02=0) seven = B3$01 .  
EXECUTE .
```

```
RECODE  
one two three four five six seven (SYSMIS=0) .  
EXECUTE .  
COMPUTE CMCfirstbirth = one + two + three + four + five + six + seven .  
EXECUTE .
```

```
IF (CMCfirstbirth ~= 0) dur_mar_firstbrith = CMCfirstbirth-V509 .  
EXECUTE .
```

```
IF (CMCfirstbirth = 0) dur_mar_interview = V008 - V509 .  
EXECUTE .
```

```
RECODE  
dur_mar_firstbrith dur_mar_interview (SYSMIS=0) .  
EXECUTE .
```

```

COMPUTE duration_firstbirth = dur_mar_firstbirth + dur_mar_interview .
EXECUTE .
RECODE
  CMCfirstbirth
  (0=0) (ELSE=1) INTO Event .
EXECUTE .
KM
duration_firstbirth BY HIV03 /STATUS=Event(1)
/PRINT MEAN
/PLOT SURVIVAL
/TEST LOGRANK
/COMPARE OVERALL POOLED .

```

**Marriage to first birth interval- Second Sample (date of marriage is less than start of calendar)**

**\*\* To avoid repetition syntax for initial selection process is not given**

```

EXECUTE .
IF (B3$04=0) three = B3$03 .
EXECUTE .
EXECUTE .
IF (B3$03=0) two = B3$02 .
EXECUTE .
IF (B3$02=0) one = B3$01 .
EXECUTE .
COMPUTE CMCfirstbirth = four + three + two + one .
EXECUTE .
IF (CMCfirstbirth ~= 0) Dur_mar_firstbirth = CMCfirstbirth - V509 .
EXECUTE .
RECODE
  Dur_mar_firstbirth (SYSMIS=0) .
EXECUTE .
IF (Dur_mar_firstbirth = 0) Dur_mar_interview = V008 - V509 .
EXECUTE .
RECODE
  Dur_mar_interview (SYSMIS=0) .
EXECUTE .
COMPUTE Duration = Dur_mar_firstbirth + Dur_mar_interview .
EXECUTE .
RECODE
  CMCfirstbirth
  (0=0) (ELSE=1) INTO Event .
EXECUTE .
RECODE
  V511
  (0 thru 18=1) (19 thru Highest=2) INTO age_marriage_Gr .
EXECUTE .
KM
currected_duration BY HIV03 /STATUS=Event(1)
/PRINT MEAN
/PLOT SURVIVAL
/TEST LOGRANK
/COMPARE OVERALL POOLED .

```

## Analysis of Interval between last two pregnancies

```
DATASET COPY HIV_Negative.  
DATASET ACTIVATE HIV_Negative.  
FILTER OFF.  
USE ALL.  
SELECT IF(HIV03=1).  
DATASET ACTIVATE DataSet4.  
EXECUTE .  
FILTER OFF.  
USE ALL.  
SELECT IF(Preg_calender ~= 0).  
EXECUTE .  
FILTER OFF.  
USE ALL.  
SELECT IF(V781=0).  
EXECUTE .  
FILTER OFF.  
USE ALL.  
SELECT IF(V781=0).  
EXECUTE .  
FILTER OFF.  
USE ALL.  
SELECT IF(Preg_calend ~= 0).  
EXECUTE .  
FILTER OFF.  
USE ALL.  
SELECT IF(VAR00002 ~= 0).  
EXECUTE .  
RECODE  
  V024  
    (9=9) (14=14) (27=27) (28=28) (29=29) (33=33) (ELSE=0) INTO  
    state_selection .  
EXECUTE .  
FILTER OFF.  
USE ALL.  
SELECT IF(state_selection ~= 0).  
EXECUTE .  
ADD FILES /FILE=*  
  /FILE='HIV_Negative'.  
EXECUTE.  
* Identify Duplicate Cases.  
SORT CASES BY V013(A) V024(A) V025(A) V106(A) V190(A) HIV03(D) .  
MATCH FILES /FILE = * /BY V013 V024 V025 V106 V190  
  /FIRST = PrimaryFirst /LAST = PrimaryLast.  
DO IF (PrimaryFirst).  
  COMPUTE MatchSequence = 1 - PrimaryLast.  
ELSE.  
  COMPUTE MatchSequence = MatchSequence + 1.  
END IF.  
LEAVE MatchSequence.  
FORMAT MatchSequence (f7).  
COMPUTE InDupGrp = MatchSequence > 0.  
SORT CASES InDupGrp(D).  
MATCH FILES /FILE = * /DROP = PrimaryFirst InDupGrp.  
VARIABLE LABELS PrimaryLast 'Indicator of each last matching case as Primary'  
  'MatchSequence 'Sequential count of matching cases' .  
VALUE LABELS PrimaryLast 0 'Duplicate Case' 1 'Primary Case'.  
VARIABLE LEVEL PrimaryLast (ORDINAL)  
  /MatchSequence (SCALE).
```

```

EXECUTE.
COMPUTE one = MatchSequence=1 .
EXECUTE .
COMPUTE two = MatchSequence=3 .
EXECUTE .
COMPUTE three = MatchSequence=5 .
EXECUTE .
COMPUTE four = MatchSequence=7 .
EXECUTE .
COMPUTE five = MatchSequence=9 .
EXECUTE .
COMPUTE cases = one + two + three + four + five .
EXECUTE .
FILTER OFF.
USE ALL.
SELECT IF(cases = 1).
EXECUTE .
IF (Births = 1) Start_B1 = B3$01 .
EXECUTE .
IF (Births ~= 1) Start_B2 = B3$02 .
EXECUTE .
COMPUTE Satrt_Dur = Start_B1 + Start_B2 .
EXECUTE .
RECODE
  Satrt_Dur
  (0=0) (ELSE=1) INTO Outcome .
EXECUTE .
IF (moths_aftercal ~= 0) CMC_start_termination = V017 + moths_aftercal .
EXECUTE .

COMPUTE Start_CMC = CMC_start_termination + Satrt_Dur_B .
EXECUTE .

IF (sustract_interview ~= 0) end_one = V008 - sustract_interview .
EXECUTE .
IF (Event=2) end_two = B3$01-9 .
EXECUTE .
IF (Event=0) end_three = V008 .
EXECUTE .

COMPUTE End_CMC = end_one + end_two + end_three .
EXECUTE .

IF (Months_marrg ~= 0) End_Nonmarried = V017 + Months_marrg .
EXECUTE .
COMPUTE Final_end_CMC = End_CMC + End_Nonmarried .
EXECUTE .
RECODE
  Event
  (0=0) (ELSE=1) INTO eventCox .
EXECUTE .
COMPUTE DurationCox = Final_end_CMC - Start_CMC .
EXECUTE .
COMPUTE Age_start = (Start_CMC - V011) / 12 .
EXECUTE .
IF (Births=1 and Termination=0) amon_one = M7$1 .
EXECUTE .
IF (Births > 1 and moths_aftercal = 0) amon_two = M7$2 .
EXECUTE .

```

```
COMPUTE Dur_amon = amon_one + amon_two .
EXECUTE .
IF (Births=1 and Termination=0) BF_one = M5$1 .
EXECUTE .
IF (Births > 1 and moths_aftercal = 0) BF_two = M5$2 .
EXECUTE .
COMPUTE Dur_BF = BF_one + BF_two .
EXECUTE .
RECODE
  Age_start
    (15 thru 19=1) (20 thru 24=2) (25 thru Highest=3) INTO AgeStart_gr .
EXECUTE .

COXREG
  DurationCox /STATUS=eventCox(1)
  /METHOD=ENTER Dur_BF Dur_amon HIV03 contraception
  /CRITERIA=PIN(.05) POUT(.10) ITERATE(20) .
COXREG
  DurationCox /STATUS=eventCox(1)
  /PATTERN BY HIV03
  /CONTRAST (HIV03)=Indicator /CONTRAST (contraception)=Indicator
  /METHOD=ENTER Dur_BF Dur_amon HIV03 contraception
  /PLOT SURVIVAL
  /PRINT=CI(95)
  /CRITERIA=PIN(.05) POUT(.10) ITERATE(20) .
```