Description

of the

Demographic and Health Surveys

Individual Recode

Data File

DHS I

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# Foreword

During DHS surveys several types of questionnaires are used. A household schedule is used to identify members of the household and to select eligible respondents for the individual interview. These selected women are then interviewed using an individual questionnaire. In addition, data are sometimes collected at the community level, and in some countries husbands are interviewed using a husband's questionnaire. Data are available from DHS for each of these surveys. The most interesting of these data are the individual data, which are available in both raw and recode formats. This document describes the standard individual recode data file.

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# **General Description**

# Introduction

This document contains three parts. The first part is a general discussion of the recode file, including the rationale for recoding; description of the physical structure in which the recode file is available; coding standards used in the data file; location of identification information; use of century month codes for dates and imputation of partial dates; DHS model questionnaires; sections and occurrences. Second, a description of each variable in the data file is provided, giving additional information that is not available in the dictionary. The third part consists of a listing of the standard dictionary providing the basic information relating to each variable.

# **Rationale for Recoding**

The individual data are transformed into a standardized recode dataset for several reasons. Firstly, dates for several key events are imputed as much analysis of the data is based on these events and their dates are often incomplete or missing. The imputed dates are included in the data file to allow analysts to produce results consistent with those published by DHS and to save analysts the time and trouble of creating their own imputation schemes. Secondly, variables as collected in the original questionnaire are in a form convenient for collection but not always for analysis. Often the same question is asked in several places in the questionnaire, but to different respondents. In the recode file these variables are often necessary in analysis and many of these, including the summary variables that are used in the DHS reports, are included in the recode file. Fourthly, certain indices, particularly the anthropometric indices from the height and weight data, are calculated from the data and included in the recode file. Finally, and in many ways most importantly, the data in the recode file are in a standardized format allowing easy comparison of data between countries.

The DHS approach to creating standardized individual recode data files for each country is part of the DHS policy to make the data accessible, providing the analyst with the data in the most convenient form for analysis. This approach, while providing easy access to the data, is not without its pitfalls. The questionnaires used in one country, while containing essentially the same information, may be different in many ways from those used in other countries. In creating the standardized individual recode data files these differences require special consideration and total standardization is obviously not possible. The recode data file is structured in two parts, standard sections and country specific sections. The standard sections contain the same variables in the same positions for all countries. The country specific sections contain all variables specific to the country and so are not standardized across countries.

# **Data File Structure**

The recode data file is available in three different structures, depending upon the hardware and software requirements of the analyst:

- Flat Each record of the data file represents one case (respondent), with all variables being placed one after the other on the same record. The repeating sections of the recode file are placed one after the other on the record, with the maximum number of occurrences of each section being represented in the data file. Each variable in a repeating section is placed immediately after the preceding variable of the same occurrence, such that all variables for occurrence 1 precede all variables for occurrence 2 of a section. For example, in the birth history BIDX, BORD, B0, B1 etc. for the first occurrence appear followed by the second occurrence of BIDX, BORD, B0, B1 etc. The length of the records in the data file are fixed, exceeding 2000 characters in total. The total size of the data file is on average approximately 10 M bytes, depending upon the sample size. The flat file is designed for mainframe users using software packages that only support data structures containing a fixed number of records per case. This format is similar to the format of the World Fertility Survey standard recode data files. An SPSS/PCdata file description is distributed with this file format.
- Rectangular Each case (respondent) in the data file contains a fixed number of records, with each record representing a section of the data file. For repeating sections there is a record for each occurrence of the section, with the maximum number of occurrences of each repeating section being included in the data file. The number of records in a data file will vary from country to country as the number of country specific sections of the data file varies, but for the standard sections of the data file there are 56 records. For data files distributed on magnetic tape the record length of each record will be fixed at the length of the longest record in the data file, but for PC users the record length will vary, with each record terminating with a CR/LF as for standard DOS text files. The total size of the data file is about 10 M bytes, although usually slightly less than the size of the flat file. The rectangular file is designed for microcomputer users using software that requires a fixed number of records per case, such as SPSS/PC, but with a maximum record length of less than 200 characters. An SPSS/PC data file description is distributed with this file format.
- Hierarchical The hierarchical data structure is identical to the rectangular data structure, with the exception that records exist only for the occurrences of the sections that are necessary. As an example of the difference, if a woman has 6 children there will be 6 records in the birth history section in the hierarchical data structure, but 20 records (the maximum number of occurrences for this section) in the rectangular data structure, with the last 14 occurrences filled with blanks. The record length will be the same as for the rectangular file. The total size of the file is approximately 5 M bytes, depending on the sample size. The hierarchical data structure is designed for use with ISSA, the Integrated System for Survey Analysis, available from DHS. An ISSA dictionary is distributed with this file format.

All of the data file structures are distributed as ASCII files for IBM and compatible microcomputers, and in either ASCII or EBCDIC character codes for mainframe computer users. The data file structures are not specific to any particular hardware or software and each structure may be used on a variety of hardware and appropriate software.

# **Coding Standards**

Special codes are used throughout the data file for certain responses. The general coding scheme is presented below. The codes given apply to 4 digit, 3 digit, 2 digit and 1 digit variables, respectively. If there are other special responses to questions, these are coded in decreasing order from these special codes, i.e., 9996, 996, 96, 6; 9995, 995, 95, 5; etc.

BLANK	Variable is not applicable for this respondent either because the question was not used in a particular country or because the question was not asked of this respondent due to the flow of the questionnaire.
9999, 999, 99, 9	This question should have been answered by the respondent, but the questionnaire contained no information for this variable.
9998, 998, 98, 8	The respondent replied "Don't know" to this question.
9997, 997, 97, 7	The answer to this question was inconsistent with other responses in the questionnaire and it was thought that this response was probably in error. The response was changed to this code to avoid further problems due to inconsistency of information.

In addition a code of 0 is generally used as a negative response in the data file. For example, "No education" is coded 0 for V106, "No problem" is coded 0 for V308 and V309, and a simple response of "No" to a question is coded 0 in all standard sections of the data file. In the country-specific sections of the data file, variables are generally coded in the same way as they were on the questionnaire and a "No" answer usually has the code 2.

# **Respondent Identification**

Each record of the data file starts with the identification for each case in the data file, and has the variable name CASEID (see the description of CASEID). It occupies the first 15 character positions of each record, irrespective of the type of data file structure.

# **Record Identification**

For rectangular and hierarchical data files, each record has an identifying code in character positions 16-17 of the record. This record identification identifies the section of the data file that is contained on the record (e.g., 21 for the birth history). Repeating sections will have the same record identification for each occurrence of the section. In the hierarchical data files a variable following the record identification in each section specifies which occurrence of the section the record represents; in the rectangular data files the variable exists for all occurrences that are non-blank.

# **Survey Identification**

For each survey there is a two-character alphabetic country identification code in variable V000 occupying positions 16-17 of the record for flat files, and positions 18-19 of the first record of the rectangular or hierarchical data files. The country codes are as follows:

Bolivia	BO	Ecuador	EC	Kenya	KE	Mexico	ΜХ
Botswana	BT			Liberia	LB	Morocco	MA
Brazil	BR	Egypt	EG	Mali	ML	Ondo State	OS
Burma	BM	El Salvador	ES			Peru	PE
Burundi	BU	Ghana	GH			Senegal	SN
Colombia	CO	Guatemala	GU			Sri Lanka	LK
Domin. Rep.	DR	Indonesia	ID			Sudan	SD

Thailand	TH	Togo	TG
		Trinidad & T	ТТ Л
		Tunisia	TN
		Uganda	UG
		Zimbabwe	ZW

# **Century Month Code**

All dates in the data file are expressed in terms of months and years and also as century month codes. A century month code (CMC) is the number of the month since the start of the century. For example, January 1900 is CMC 1, January 1901 is CMC 13, January 1960 is CMC 721, September 1988 is CMC 1065. The CMC for a date is calculated from the month and year as follows:

CMC = (YY \* 12) + MM

for month MM in year 19YY.

To calculate the month and year from the CMC use the following formulae:

YY = int((CMC - 1) / 12)MM = CMC - (YY \* 12)

# **Imputed Dates**

For key events in the respondent's life, dates have been imputed when the full date of the event was not provided by the respondent or in some cases if dates are inconsistent (e.g. less than 7 months between births). These events are the date of birth of the respondent, the date of birth of each child of the respondent, the date of conception of the current pregnancy, the date of sterilization, and the date of first union or marriage. For each of these dates only the imputed data are available in the recode data file, but a date flag has been included in the file to show what format the information was in prior to imputation, and what basis was used for the imputation. The codes for this date flag are as follows:

- 1 Both month and year of the event were specified and so no imputation was necessary.
- 2 The year of the event, but not the month, and the age of the respondent or child or, in the case of the date of first union, the respondent's age at first union were specified and only the month of the event was imputed.
- 3 The year of the event was given but the month of the event was not specified, and neither was the age. Month of the event was imputed.
- 4 Neither the month nor the year of the event were specified, but age was given and the year and month of the event were imputed from the age.
- 5 Only the month of the event was given, without the year or age. As this is not sufficient to provide any constraints on the date of the event, it is ignored, and both the month and the year of the event were imputed from other constraining information.
- 6 No information was given concerning the date of the event. But month and year of the event were imputed from other information.
- 7-9 Country specific codes are used in addition to the preceding codes in some countries.

Age of the respondent or child, or age at marriage are calculated from the imputed month and year of the event.

- For the date of conception of the current pregnancy, the flag has only two possible codes:
- 5 Months of pregnancy was given and so the date of conception can be calculated exactly.
- 6 Months of pregnancy was not given and the date of conception was imputed.

The date of interview is required to be fully specified in all cases and so no imputation is necessary for this variable and no format flag exists for the date of interview.

A full description of the imputation process is available in the DHS Data Processing Manual.

# **Core Questionnaires**

Two core questionnaires were used during the DHS surveys, Model "A" for High Contraceptive Prevalence Countries and Model "B" for Low Contraceptive Prevalence Countries. The two questionnaires contain basically the same information, although there are more questions of contraceptive practices in the Model "A" questionnaire than in the Model "B" questionnaire, and more questions relating to health in the Model "B" questionnaire than in the Model "A" questionnaire.

In the column next to the variable name in the variable description section that follows, an "A" indicates that the variable relates to a question asked only in countries that used the Model "A" questionnaire, and a "B" indicates that the variables relate to a question asked only in countries that used the Model "B" questionnaire. If the column is blank, then the question is asked in both Model "A" and Model "B" questionnaires. If the column contains an "X", then the question is not included in either of the Model questionnaires, but was used in a sufficient number of surveys to justify its inclusion as a standard variable.

# **Sections and Occurrences**

The data file is broken down into a number of logical sections. These sections translate directly into records for the rectangular and hierarchical data structures. The logical sections are designed to map the sections of the model questionnaires, although some sections of the model questionnaire are split into more than one section in the recode file. Some of these sections are repeating or multiple occurrence sections while others are single occurrence sections. Single sections contain simple, single answer variables.

Multiple sections are used to represent sets of questions that are repeated for a number of events. The birth history is an example of a multiple section, where questions relating to children are asked for each child, and each child has an entry in the birth history. Each entry in the multiple section is known as an occurrence of the section. In rectangular and hierarchical data files each occurrence of the section occupies a separate record. Multiple sections are used for sets of questions where the number of occurrences may vary.

In contrast, sets of questions for which there are a fixed number of occurrences are held in a group. A group is similar to a multiple section, but is stored on a single record for rectangular and hierarchical files. In addition single variables may also be included in a section containing a group. In the recode file the contraceptive table (REC31) is stored as a group containing 15 entries, one for each contraceptive method. For the flat files there is no difference between groups and multiple sections.

#### Section and Variable Descriptions

The section description following gives an outline of the sections of the recode file and the types of information they contain. The description is based on the rectangular and hierarchical files. The section description gives the name of the section, the section code used to identify the section in the data file, the length of the record for that section, the section class: S for single and M for multiple, the minimum and maximum number of occurrences of the section in each case, and the section label.

The section description is followed by variable descriptions. These are designed to be read with the dictionary listing which follows the variable descriptions. The variable descriptions provide additional background information relating to each variable that is not included in the dictionary listing. The

dictionary listing contains the variable names and their labels, the location of each variable on the record, whether the variable is a single variable within the section or part of a group, the range of values, and their labels.

			Occur	rences		
Section	Code I	Length	Class	Min	Max	Section label
REC01	01	66	S	1	1	Respondent's Basic Data
REC11	11	67	S	1	1	Respondent's Basic Data
REC21	21	47	М	0	20	Reproduction (Birth History)
REC22	22	62	S	1	1	Reproduction
REC31	31	155	S	1	1	Contraceptive Table
REC32	32	121	S	1	1	Contraceptive Use
REC33	33	34	М	0	7	Contraceptive Practice
REC41	41	33	М	0	6	Maternity
REC42	42	42	S	1	1	Health & Breastfeeding
REC43	43	104	М	0	6	Health
REC44	44	67	М	0	6	Height and Weight
REC51	51	61	S	1	1	Marriage/Exposure
REC61	61	38	S	1	1	Fertility Preferences
REC71	71	37	S	1	1	Husband's Characteristics
REC81	81	40	S	1	1	Characteristics of Interview
REC91	91	?	S	0	1	Country specific - Single variables
REC92	92	?	М	0	20	Country specific - Births
REC93	93	?	М	0	7	Country specific - Contraception
REC94	94	?	М	0	6	Country specific - Maternity
REC95	95	?	М	0	6	Country specific - Health
REC96	96	?	М	0	6	Country specific - Height and Weight
REC97	97	?	?	0	?	Country specific
REC98	98	?	?	0	?	Country specific
REC99	99	?	?	0	?	Country specific

# Section and Variable Description

? implies that the entry is country-specific

# Section 01 (REC01)

#### Var Model Description

- CASEID Case identification used to uniquely identify each respondent. In most surveys this is constructed by concatenating the cluster or sample point number, the household number and the respondent's line number, but in some surveys this may be the questionnaire number taken from the front page of the questionnaire.
- V000 Alphabetic country code to identify the survey from which the data were collected. The code is based on an international standard code. For example: DR is the Dominican Republic, MA is Morocco, ML is Mali, LK is Sri Lanka.
- V001 Cluster number is the number identifying the sample point as used during the fieldwork.
- V002 Household number is the number identifying the household in which the respondent was interviewed, within the sample point.
- V003 Respondent's line number in the household schedule.
- V004 Enumeration area is a number assigned to each sample point to identify the primary sampling units for use in the calculation of sampling errors. This variable is usually the same as the cluster number, but may be a sequentially numbered variable for samples with a more complicated structure.
- V005 Sample weight is an 8 digit variable with 6 implied decimal places. To use the sample weight divide it by 1000000 before applying the weighting factor. All sample weights are normalized such that the weighted number of cases is identical to the unweighted number of cases when using the full dataset with no selection. This variable should be used to weight all tabulations produced using the data file. For self weighting samples this variable is equal to 1000000.
- V006 Month of interview.
- V007 Year of interview.
- V008 Century month code of date of interview (see note on century month codes).
- V009 Month of birth of respondent (see note on imputed dates).
- V010 Year of birth of respondent (see note on imputed dates).
- V011 Century month code of date of birth of the respondent (see note on century month codes).
- V012 Current age in completed years is calculated from the century month code of the date of birth of the respondent (V011) and the century month code of the date of interview (V008). In a few cases the age in the data file will be different from that reported by the respondent when the respondent's birthday was in the month of interview, but she had not yet had her birthday. If the respondent correctly reported her age at her last birthday (and not her age at her next birthday) then the calculated age was rounded up from the reported age, to avoid inconsistencies between the age and the century month code for the birth.
- V013 Current age in 5 year groups is produced by grouping V012.
- V014 Completeness of information for the date of birth of the respondent (see note on imputed dates).

### Section 11 (REC11)

Var Model Description

- V101 Region of residence in which the respondent was interviewed. Codes are country specific.
- V102 Type of place of residence where the respondent was interviewed as either urban or rural. Note that this was not the respondent's categorization, but was created based on the cluster or sample point number.
- V103 Childhood place of residence is classified into City, Town and Countryside as reported by the respondent.
- V104 Number of years the respondent lived in the village, town, or city where she was interviewed.
- V105 Type of place of previous residence is coded as for V103. BASE: All respondents except those answering "Always" or "Visitor" to V104 (V104 <>95 & V104 <>96).
- V106 Highest education level attended. This is a standardized variable providing level of education in the following categories: No education, Primary, Secondary, Higher. In some countries the educational system does not fit naturally within this scheme and a different categorization was used for the Final Report. In this case, this variable is constructed as accurately as possible from the country's own scheme and the variable used for the Final Report is included as a country specific variable.
- V107 Highest year of education gives the years of education completed at the level given in V106.

BASE: All respondents except those answering "No education" or with missing data for V106 (V106 < > 0 & V106 < > 9).

- V108 Literacy of the respondent. In many countries, respondents with secondary or higher levels of education are coded 1, "Reads easily." The exact criteria for this assumption is country specific.
- V109 A Whether the respondent usually reads a newspaper or magazine at least once a week. BASE: Respondents who can read easily or with difficulty (V108 = 1 or 2).
- V110 A Whether the respondent usually watches television every week.
- V111 A Whether the respondent usually listens to a radio every day.
- V112 B Whether the respondent usually listens to a radio every week.
- V113 Major source of drinking water for members of the household. Codes are country specific.
- V114 Major source of water for household use other than for drinking. Codes are country specific.
- V115 A Time taken to get to the water source for household water. BASE: All respondents except those with household water piped into the residence, yard or plot (V114 < > 1 & V114 < > 2). The actual selection criteria is country-specific.
- V116 Type of toilet facility in the household. Codes are country specific.

V117	В	The age that children first use the household toilet facility. BASE: All respondents except those with no toilet facilities (V116 $< > 0$ ).
V118		Whether the household has a cake of soap on the premises.
<u>Var</u> V119 V120 V121 V122	<u>Model</u>	Description Whether the household has: Electricity. A radio. A television. A refrigerator.
V123 V124 V125 V126		Whether a member of the household has: A bicycle. A motorcycle. A car. A tractor. (Usually coded 0 "No" for urban residents.)
V127 V128 V129	X X	Main material of the floor. Codes are country specific. Main material of the walls. Codes are country specific. Main material of the roof. Codes are country specific.
V130 V131 V132	В	Religion. Both the question and the codes are country specific. Ethnicity. Both the question and the codes are country specific. Association membership. Both the question and the codes are country specific.
V133		Education in single years. This variable is constructed from the educational level (V106) and the grade at that level (V107) as follows: V106 = > V133 0 = > 0 1 = > V107 2 = > V107+x 3 = > V107+y 9 = > 99 x = years to complete primary education y = years to complete primary and secondary education where both x and y are country specific.
V134		De facto place of residence is the type of place in which the respondent was interviewed. Urban areas are classified into City and Town, and rural areas are assumed to be countryside.
V135		Whether the respondent is a usual resident of the household or is just visiting the household. Responses of "Visitor" to V104 are visitors to the City, Town or Village where the interview took place, but V135 shows respondents who were visitors to the household.

- V136 Total number of household members is the number of usual residents and the number of visitors who slept in the house the previous night that were listed in the household schedule.
- V137 Number of children resident in the household and aged 5 and under. Visiting children are not included.
- V138 Number of eligible women in the household. Eligible women are usually defined to be women aged 15-49 who slept in the household the previous night, irrespective of whether they usually reside in the household or are visiting the household. In some countries an ever-married sample is used for the individual interview, and so the eligibility criteria is further restricted to ever-married women. In several countries the age range used may be different, e.g., 15-44.

# Section 21 (REC21)

# Reproduction

The birth history contains up to 20 entries for births, and is ordered in reverse order such that the last birth is given first in the birth history and the first birth is given last. For respondents with more than 20 births, the birth history contains the last 19 births plus the first birth. However, all variables relating to intervals between births are calculated based on the actual births, and not just the birth sgiven in the birth history. The variable V224 contains the count of entries in the birth history, and is thus the index to the last entry in the birth history which contains the information relating to the first birth.

Var Model Descripti	on
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- BIDX Birth history index numbers the entries in the birth history from 1 to n, where the nth birth is the first birth.
- BORD Birth order number gives the order in which the children were born and so is the reverse order from BIDX.
- B0 Twin code gives an order number for each child of a multiple birth. Code 0 indicates a single birth, code 1 upwards give the number of the child. Twins are ordered in the birth history with the higher twin codes appearing before the lower twin codes. See the example of the birth history structure below.
- B1 Month of birth of child (see note on imputed dates).
- B2 Year of birth of child (see note on imputed dates).
- B3 Century month code for the date of birth of the child (see note on century month codes).
- B4 Sex of child.
- B5 Whether child was alive or dead at the time of interview.
- B6 Age at death of the child as reported in the questionnaire. The first digit of the age at death gives the units in which it was reported: 1 Days, 2 Months, 3 Years, 9 Special responses. The last two digits give the age at death in those units. Age at death is usually reported in days if it was less than one month, in months if it was less than two years and otherwise in years. If the last two digits contain a value greater than 90 then this is a special response. For example, 298 means the age at death was a number of months, and the exact number was unknown, but lies between 1 and 23 months. BASE: Dead children (B5 = 0).
- B7 Age at death of the child in completed months gives a calculated age at death from the reported information. If it was reported in days these are truncated to completed months, if reported in months these are used directly, but if reported in years then truncated years are used, i.e., 3 years becomes 36 months. For ages at death that were not specified, an age at death is imputed using a hot deck approach by taking the same age at death as the last child encountered of the same birth order in the data file. Ages at death exceeding 90 months are truncated to 90 months. BASE: Dead children (B5 = 0).

B8	Current age of the child in single years for all living children. BASE: Living children ( $B5 = 1$ ).
B9	Whether the child usually lives with the respondent. BASE: Living children ( $B5 = 1$ ).
B10	Completeness of information for the date of birth of the child (see note on imputed dates).
B11	Preceding birth interval is calculated as the difference in months between the current birth and the previous birth, counting twins as one birth. BASE: All births except the first birth and its twins.
B12	Succeeding birth interval is calculated as the difference in months between the current birth and the following birth, counting twins as one birth. BASE: All births except the last birth and its twins.

#### Example Birth History:

BIDX	BORD	ВO	В1	В2	В3	В4	В5	В6	В7	B8	В9	B10	B11	B12
1	7	2	5	87	1049	1	1			1	1	1	19	
2	6	1	5	87	1049	2	1			1	1	1	19	
3	5	0	10	85	1030	2	0	114	0			3	22	19
4	4	0	12	83	1008	1	1			4	1	2	17	22
5	3	2	7	82	991	2	0	208	8			3	28	17
6	2	1	7	82	991	2	1			6	1	3	28	17
7	1	0	3	80	963	1	1			8	0	4		28

In this example there are seven children, including two pairs of twins. There are three boys and four girls. Two of the girls have died, one after 14 days and the other after 8 months. Exact dates of birth were available only for the last birth and its twin. For the other births either year only (code 3), year and age (code 2) or age only (code 4) were available. The birth intervals are calculated between births excluding children of multiple births. For example the preceding interval for the first entry is the difference between the CMC for the first entry and the third entry because the second entry is a twin of the first entry.

# Section 22 (REC22)

<u>Var</u>	Model	Description
V201		Total number of children ever born. If there are fewer than twenty births then this is the same as V224 (Number of entries in the birth history), but if there are more than twenty births then this gives the full number, while V224 will be 20.
<b>W202</b>		Total number of song living at home
V202		Total number of doughters living at home.
V203		Total number of cons living away from home
V204 V205		Total number of daughters living away from home
V205 V206		Total number of sons who have died
V200		Total number of daughters who have died.
		V201 is the sum of variables V202 to V207.
V208		Total number of births in the last five years is defined as all births in the months 0 to 59 prior to the month of interview, where month 0 is the month of interview.
V209		Total number of births in the past year is defined as all births in the months 0 to 12 (not 0 to 11) prior to the month of interview.
V210		Total number of births in the month of interview.
V211		Century month code of the date of first birth is the same as B3 (V224). BASE: All respondents with one or more births (V201 $> 0$ ).
V212		Age of the respondent at first birth is calculated from the CMC of the date of first birth and the CMC of the date of birth of the respondent. BASE: All respondents with one or more births (V201 > $0$ ).
V213		Whether the respondent is currently pregnant.
V214		Imputed duration of the current pregnancy. In the imputation process a date of conception of the current pregnancy is calculated from the reported duration of the current pregnancy, if known, or imputed from other available information (see note on imputed dates). The imputed duration of pregnancy is then calculated from that date of conception. BASE: Currently pregnant women (V213 = 1).
V215		Time since last menstrual period as reported by the respondent. The first digit gives the units in which the response was given by the respondent: 1 - Days ago, 2 - Weeks ago, 3 - Months ago, 4 - Years ago, 9 - Special answers. The last two digits give the time since the last period in those units. If the last two digits contain a number greater than 90 then this is a special response. For example, 199 means the response was in days but the number of days was missing on the questionnaire.
V216		Whether the respondent menstruated in the last six weeks is calculated from V215.
V217		Knowledge of the ovulatory cycle indicates when during her monthly cycle the respondent thinks a woman has the greatest chance of becoming pregnant.

V218	Total number of living children is the sum of variables V202 to V205.
V219	Total number of living children including current pregnancy is calculated from V218 by adding 1 if the respondent is pregnant.
V220	Total number of living children including current pregnancy is a grouping of the previous variable, truncating the number to 6 if it was greater than 6.
V221	Interval between the first marriage and first birth in months. If the first birth was prior to the first marriage then this variable is coded 996 "Negative interval." BASE: Ever-married women who have had one or more births ( $V501 > 0 & V201 > 0$ ).
V222	Interval between the last birth and the date of the interview in months. BASE: Respondents who have had one or more births (V201 > $0$ ).
V223	Completeness of information relating to the date of conception of the current pregnancy. This variable indicates whether the date of conception was exactly specified by the duration of the current pregnancy or the duration was imputed from other information (see note on imputed dates).
V224	Number of entries in the birth history (REC21). This variable is also the index to the first birth in the birth history.

### Section 31 (REC31)

#### <u>Var</u> <u>Model</u> <u>Description</u>

- V301 Knowledge of any method is classified into modern, and traditional methods as follows: Modern methods are Pill, IUD, Injections, Diaphragm/Foam/Jelly, Condom, Female Sterilization, Male Sterilization and Norplant. Traditional methods are Periodic Abstinence (Rhythm), Withdrawal, and Abstinence, and any other country specific methods. If a respondent knows both a traditional method and a modern method then the modern method takes priority and she is coded as knowing a modern method.
- V302 Ever use of a modern or traditional method is created in the same way as V301.
- V303 Knowledge of a source for a modern method indicates whether the respondent could name a source from which she believed she would be able to obtain a modern method. There is no verification as to whether this source would be able to supply the method.

#### Contraceptive Table

Var

Model Description

The contraceptive table contains entries for 15 contraceptive methods, and for each entry gives information relating to knowledge of the method, ever use of the method, knowledge of a source for the method and problems related to using the method. Entries 1 to 12 are standard but entries 13 to 15 are used for country specific methods. The methods relating to each entry are as follows:

1	Pill	8	Periodic Abstinence (Rhythm)
2	IUD	9	Withdrawal
3	Injections	10	Other methods
4	Diaphragm/Foam/Jelly	11	Norplant
5	Condom	12	Abstinence
6	Female Sterilization	13	Country specific method 1
7	Male Sterilization	14	Country specific method 2
		15	Country specific method 3

The contraceptive table contains variables V304 to V309 as follows:

V304	Knowledge of the method, differentiating between spontaneous responses and probed responses for each method. If questions relating to the method were not asked in a particular country then code 8 "Not asked" is used.
V305	Whether the respondent has ever used the contraceptive method. BASE: Respondents who knew of the method, either spontaneously (1) or after probing (being read a description of the method) (2) according to V304.
V306	Source (or source of information for periodic abstinence) known for the contraceptive method. Codes are country specific. BASE: Respondents who knew of the method, for modern methods plus periodic abstinence.
V307	Source (or source of information or instruction for periodic abstinence) known for the contraceptive method in standard coding groups is constructed from V306. BASE: Respondents who knew of the method, for modern methods plus periodic abstinence.

Var	Model	Description
V308		Main problem with using the contraceptive method. Codes are country specific. BASE: Respondents who knew of the method, for all methods except "Other method."
V309		Main problem with using the contraceptive method in standard coding groups is constructed from V306. BASE: Respondents who knew of the method, for all methods except "Other method."

#### Example Contraceptive Table:

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	Pill	IUD	Inj	Dia	Cond F.	St.M.	St.	P.Ab.	With	Other	Norpl	Abst	CS1	CS2	CS3
V304 V305 V306 V307 V308 V309	1 0 8 4 6 6	0	0	0	1 1 8 4 6 6	2 0 1 1 9 9	0	1 10 5 98 98	2 0 11 5 98 98	0	8	8	8	8	8

In this example the entries in the table are shown across the page while the variables in each entry are shown down the page. The numbers shown above the method names are the occurrence or entry number associated with that method. The respondent knew three methods, Pill, Condom and Periodic Abstinence, without probing and knew two more, Female Sterilization and Withdrawal, after probing by the interviewer. The respondent has used Condoms and Periodic Abstinence. The respondent reported several sources for the methods: Pharmacy for Pill and Condom, Hospital for Female Sterilization, Church for instruction on Periodic Abstinence, and Friends for information about Withdrawal. She believed Pills and Condoms cost too much, and the main problem with Female Sterilization is that the method is permanent. She did not know of any problem with Periodic Abstinence or Withdrawal.

# Section 32 (REC32)

<u>Var</u> V310	<u>Model</u>	<u>Description</u> Number of living children at the time the respondent first used a contraceptive method. BASE: All respondents who have ever used a contraceptive method (V302 > $0$ ).
V311		Number of living children at the time of first use is a grouped form of V310, with 4 or more truncated to 4 and respondents who have never used a contraceptive method coded 5.
V312		Current contraceptive method. Pregnant women are coded 0 "Not currently using."
V313		Type of contraceptive method categorizes the current contraceptive method as either a modern method, or a traditional method.
V314		Method of periodic abstinence indicates how the respondent determined on which days to abstain from sexual intercourse the last time the respondent used periodic abstinence. BASE: Ever users of periodic abstinence $(V305(8) = 1)$ .

#### Sterilization.

Variables V315 to V322 relate to dates of sterilization. BASE: Women who are sterilized or whose partner is sterilized (V312 = 6 or V312 = 7).

Var	Model	Description
V315	А	Month of sterilization of the respondent or her current partner (see note on imputed dates).
V316	А	Year of sterilization of the respondent or her current partner (see note on imputed dates).
V317	А	Century month code for the date of sterilization (see note on century month codes).
V318	А	Completeness of information for the date of sterilization of the respondent or her partner (see note on imputed dates).
V319	А	Years since sterilization in 2 year groups, truncated at 10 years.
V320	А	Age at sterilization in 5-year groups < 25, 25-29, 30-34, 35-39, 40-44, 45-49.
V321	А	Marital duration at sterilization in 5-year groups with single women and those sterilized before marriage coded 0.
V322	А	Parity at sterilization, truncated at 5+ children.

# Pill Use.

Variables V323 and V325 relate to the use of the pill. BASE: Respondents currently using the pill (V312 = 1).

val widdel Description	Var	Model	Description
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- V323 A Brand of pill currently being used by the respondent. Codes are country specific.
- V324 A Whether the respondent is using the social marketing pill brand of that country.
- V325 A Cost of pills in the local currency.

#### Source of modern contraceptive methods.

Variables V326 to V328 relate to sources of contraception for current users of modern methods. BASE: Respondent currently using a modern method (V312 > = 1 and < = 7 or = 11).

Var	Model	Description
V326		The last source visited to obtain the current modern contraceptive method. Codes are country specific.
V327		The last source visited for users of modern methods in standard coding groups constructed from V326.
V328	А	Satisfaction with services received at the last source visited. BASE: Respondents currently using a modern method who visited a modern medical facility. The actual selection criteria is country specific, but generally will include those who visited the following facilities: Government Hospital, Government Health Center, Family Planning Clinic, Mobile Clinic, Field Worker, Private Doctor, or Private Hospital or Clinic. Pharmacies, Shops and other similar sources are usually excluded.

#### Source of method or information for users of traditional methods.

Variables V329 to V331 relate to the last source visited for users of traditional methods. BASE: "A" questionnaire - current users of traditional methods (V312 > = 8 and < > 11). "B" questionnaire - current users of periodic abstinence (V312 = 8).

#### Var Model Description

V329 Source of information for users of traditional methods. Codes are country specific. For countries using the model "A" questionnaire, the respondent is asked whether she visited a source to obtain a method to avoid pregnancy or instructions for using periodic abstinence in the last twelve months, irrespective of which traditional method the respondent is currently using. If the response was "No" code 0 "Did not visit source" was used. If the response was "Yes" the source for the method was recorded. Note that the source does not relate to the traditional method currently being used, but to the last source visited to obtain any method or instruction in the last twelve months. For countries using the Model "B" questionnaire, the variable contains the source of

For countries using the Model "B" questionnaire, the variable contains the source of instruction for periodic abstinence users only.

- V330 Source of information for traditional method users in standard coding groups is constructed from V329.
- V331 A Satisfaction with the services received at the source given in V329. BASE: Current users of traditional methods who visited a modern facility (see V328).

#### Source of method or information for past users of contraception.

Variables V332 to V334 relate to the last source visited in the last twelve months for past users of contraception.

BASE: Past users of contraception (V302 > 0 and V312 = 0).

<u>Var</u> <u>Model</u> <u>Description</u>

V332 A Past users of contraception are asked for the last source visited in the last twelve months. If no source was visited in the last twelve months the source is coded 0 "No source visited." Codes are country specific.

Var Model Description

- V333 A Last source visited in the last twelve months for past users in standard coding groups is calculated from V332.
- V334 A Satisfaction with the services received at the source given in V332. BASE: Past users of contraception who visited a modern medical facility (see V328).

#### Current use of contraception.

Variables V335 to V340 relate to the current use of contraception. BASE: Current users of contraception (V312 < > 0).

- <u>Var</u> <u>Model</u> <u>Description</u>
- V335 A Duration of use of the current contraceptive method months.
- V336 A Duration of use of the current contraceptive method years.

These variables give the duration of use in years and months of the current method for all methods except for female or male sterilization where the date of sterilization is given. BASE: Current users of contraception except for women who are sterilized or whose partners are sterilized (V312 < > 0 and V312 < > 6 and V312 < > 7).

- V337 Months of use of the current contraceptive method is calculated from the preceding variables, and from the date of sterilization for women who are sterilized or whose husbands are sterilized. If either the years or the months of use is missing, unknown or inconsistent, then this variable is set to be the same. If the response to the question of the duration of use of the current method is "Since the last birth," then this variable is set to the length of the interval between the last birth and the date of interview.
- V338 A Main problem experienced with using the current contraceptive method. Codes are country specific.
- V339 A Main problem experienced in standard coding groups is constructed from V338.
- V340 A Other method used during the month before interview. BASE: Current users of contraception except for women who are sterilized or whose partners are sterilized.

#### Last method used prior to current method.

<u>Var</u> <u>Model</u> <u>Description</u>

V341 A Last method used (since the last birth) before the current method for current users of contraception.
 BASE: All current users of contraception (V312 < > 0).

#### Last use of contraception prior to current method.

Variables V342 to V349 relate to the last period of contraceptive use prior to the current method. BASE: Current users of contraception who used a contraceptive method (since the last birth) prior to the current method (V312 < > 0 and V341 > 0).

Var	Model	Description
V342	А	Date of start of use of the method before the current method - month.
V343	А	Date of start of use of the method before the current method - year.
		No imputation has been performed on the date of start of use of the method before the current method, and incomplete dates remain in the data file.
<u>Var</u>	<u>Model</u>	Description
V344	А	Century month code of the date of start of use of the method before the current method. If either the month or year of the start of use is missing, unknown or inconsistent then this variable is set to be the same.
V345	А	Completeness of information relating to the date of start of use of the method before the current method.
V346	А	Duration of use of the method prior to the current method - months.
V347	А	Duration of use of the method prior to the current method - years.
V348	A	Duration of use of the method prior to the current method in months is calculated from the preceding variables. If either the years or months is missing, unknown or inconsistent then this variable is set to be the same.
V349	А	Main reason the respondent stopped using the method prior to the current method. Codes are country specific.

#### Last method used in the Open Birth Interval for past users.

### Var Model Description

V350 A Last method used (since the last birth) for past users of contraception. BASE: Ever users of contraception who are not currently using a contraceptive method (V302 > 0 and V312 = 0).

#### Last use of contraception in the Open Birth Interval (OBI).

Variables V351 to V358 relate to the last period of contraceptive use (since the last birth) for past users of contraception.

BASE: Ever users of contraception, who have used a contraceptive method (since the last birth), but are not currently using a method (V302 > 0 and V312 = 0 and V350 > 0).

- <u>Var</u> <u>Model</u> <u>Description</u>
- V351 A Date of start of use of the last method used in the OBI month.
- V352 A Date of start of use of the last method used in the OBI year. No imputation has been performed on the date of start of use of the last method used in the OBI, and incomplete dates remain in the data file.
- V353 A Century month code of the date of start of use of the last method used in the OBI. If either the month or year of the start of use is missing, unknown or inconsistent then this variable is set to be the same.
- V354 A Completeness of information relating to the date of start of use of the last method used in the OBI.

- V355 A Duration of use of the last method used in the OBI months.
  V356 A Duration of use of the last method used in the OBI years.
  V357 A Duration of use of the last method used in the OBI in months is calculated from the preceding variables. If either the years or months is missing, unknown or inconsistent then this variable is set to be the same.
- V358 A Main reason the respondent stopped using the last method used in the OBI. Codes are country specific.

#### Last method discontinued in the last five years.

Variables V359 and V360 relate to the last method discontinued in the last five years. The period of five years is taken as an approximate period for the following two variables to allow the classification of the reasons for discontinuation by method. The period of five years cannot be accurately calculated in all cases due to incomplete or missing dates for the start of use of contraceptive methods and incomplete durations for the length of time the method was used. Cases are included if the date of discontinuation of either the method before the current method, for current users, or the last method, for past users, definitely falls within the last five years. BASE: Respondents with a method in the last five years.

BASE: Respondents with a method in the last five y

- <u>Var</u> <u>Model</u> <u>Description</u>
- V359 A Last method discontinued in the last five years.
- V360 A Reason for the discontinuation of the last method discontinued in the last five years.

#### Pattern and intentions for future use.

Variables V361 to V364 relate to the respondent's past contraceptive practice and future intentions for using contraception.

#### Var Model Description

- V361 Pattern of past contraceptive use. For model "B" questionnaires the questions relating to contraceptive use since the last birth are not asked and thus the respondent can not be categorized as having used a method since the last birth or having only used a method before the last birth. In countries using the model "B" questionnaire, all past users are given code 3.
- V362 Intention to use a contraceptive method in the future is based on two questions in the model questionnaires, and classifies those intending to use a method in the future by whether they intend to use that method in the next twelve months or not. The two "Unsure" categories correspond to replies of unsure about using a method in the future (Unsure about use) or, for those intending to use a method in the future, whether they intend to use that method in the next twelve months.

BASE: All respondents not currently using contraception (V312 = 0).

V363 Preferred future method for respondents intending to use a method in the future. BASE: Respondents not currently using a method, but intending to use a method in the future (V312 = 0 and V362 = 1 or 2 or 3)).

- V364 Contraceptive use and intention shows current users of modern methods, current users of traditional methods, non-users who intend to use in the future and non-users not intending to use a method.
- V365 A Whether the respondent has heard a family planning message on the radio.
- V366 Acceptability of family planning messages being provided on radio or television.
- V367 Whether the last child born in the last five years was wanted at that time, later or not at all. For countries using the model "A" questionnaire this variable is extracted from the information given in the contraceptive practice table. For countries using the model "B" questionnaire this variable comes from a single question.

# Model Description

<u>Var</u> V368 Number of entries in the contraceptive practice table. This will be zero for all countries using the model "B" questionnaire.

#### Section 33 (REC33)

The contraceptive practice history contains up to seven entries, relating to births in the five years preceding interview and to the current pregnancy. The entries are ordered in reverse order, such that the entry relating to any current pregnancy will be the first, followed by the entry relating to the last birth in the last five years, and so on. If there is no current pregnancy then the first entry will be that relating to the last birth in the last five years. For multiple births there is only one entry. See the example contraceptive practice history below. If there are more than seven births (including the current pregnancy) then only the last seven are used in the contraceptive practice history. The period of five years covers months 0 to 60 prior to the date of interview, with month 0 being the month of interview. Month 60 is included in this section to allow the calculation of wanted fertility rates based on months 1 to 60 prior to interview.

<u>Var</u> CPIDX	Model A	<u>Description</u> Index to the birth history. For the current pregnancy the index is 0. For births it gives the number of the entry in the birth history. If the birth was a multiple birth then the index points to the birth with the highest index in the birth history. See the example of the contraceptive practice history below.
CP1	А	Last contraceptive method used in the interval before the birth and after the preceding birth.
CP2	А	Method used before the last method in the interval between the birth and the preceding birth.
CP3	А	Duration of use of the last method in the interval - months.
CP4	А	Duration of use of the last method in the interval - years.
		BASE: Respondents using a method in the interval (CP1 $< > 0$ ).
CP5	Α	Duration of use of the last method in the interval in months is calculated from the preceding variables. If either the years or months is missing, unknown or inconsistent then this variable is set to be the same. BASE: Respondents using a method in the interval ( $CP1 < > 0$ ).
CP6	А	Main reason the respondent stopped using the last method in the interval. Codes are country specific. BASE: Respondents using a method in the interval (CP1 $< > 0$ ).
CP7	А	Desire for birth is whether the respondent wanted the child at that time, later or not at all. Respondents who stopped using the method to get pregnant are coded as wanting the child then.
CP8	A	Fertility planning status classifies the previous variable by whether a contraceptive method was used in the interval.
CP9	А	Outcome of the birth gives the number of children born in this pregnancy, i.e., a single birth is coded 1, twins coded 2, triplets coded 3, etc. If the interval relates to contraceptive use

prior to the current pregnancy the outcome is coded 0.

#### Example Contraceptive Practice History:

CPIDX	CP1	CP2	CP3	CP4	CP5	CP6	CP7	CP8	CP9
0	0	0					3	3	0
2	5	8	6	0	6	6	2	5	2
3	8	0	0	1	12	2	2	5	1
4	0	0					1	1	1

In this example, based on the birth history example, there are four entries in the history. The first is for the current pregnancy and the respondent has not used a method in the interval between the last birth and the current pregnancy and the pregnancy is not wanted. The other entries represent the births in the five years preceding the interview (assumed to take place in September 1988). Note that there is no entry for the child with index 1 as this child is a twin of the child with index 2. Before child 2 condoms and, prior to that, periodic abstinence were used. Condoms were used for 6 months and the reason the respondent stopped was because they cost too much (assuming the same codes as used in the Model "A" questionnaire). The birth was not wanted then but was wanted later and the outcome was twins.

#### Section 41 (REC41)

The maternity history contains up to six entries, relating to births in the five years preceding interview. The entries are in reverse order, such that the first entry relates to the last birth in the last five years. There is an entry for all children born in the last five years including all twins. The period of five years includes months 0 to 59 prior to the interview, with month 0 being the month of interview. Month 60 is not included in this section, unlike the contraceptive practice history. If there are more than six births in the last five years then only the last six are included in the maternity history. For the variables duration of breastfeeding , duration of amenorrhea and duration of abstinence (M4 to M9) each variable may have several cases coded 97 "Inconsistent" as the reported duration of breastfeeding, amenorrhea or abstinence was impossible in the interval between the birth and the following birth or date of interview if the most recent birth (only the date of interview in the case of breastfeeding).

Model Description Var MIDX Index to the birth history. All births in the last five years have entries in this section, and thus the index increases by one each entry. See the example maternity history below. For twins the information in their entries will be identical for all variables except for the variables relating to breastfeeding (M4 & M5). M1 Whether a tetanus injection was given during the pregnancy to avoid convulsions after birth. M2 The type of person who gave prenatal care to the respondent prior to the birth. The coding is standardized, but in many surveys no differentiation is made between trained nurses and trained midwives. In these cases code 2 is used for trained nurse/midwife. In other surveys the question asks where the respondent received prenatal care, in which case this variable is blank and a country specific variable is used for place where treatment was given. M3 The type of person who assisted with the delivery of the child. As for M2, trained nurse and trained midwife are combined in many countries. In other countries the question asks for the type of place where the child was delivered, in which case this variable is blank and a country specific variable is included for the place of delivery. M4 The duration of breastfeeding of the child in months. The maximum period allowed during the data editing was the interval between the date of birth of the child and the date of interview. Cases which exceeded this duration were set to code 97 "Inconsistent". M5 The calculated months of breastfeeding gives the duration of breastfeeding as in M4, but with the duration calculated if the respondent is still breastfeeding the child or the child was breastfed until it died. M6 The duration of amenorrhea after the birth of the child in months. The maximum period allowed during the data editing was the interval between the date of birth of the child and the date of conception of the following child (date birth less seven months was used for the date of conception) or the date of interview if there was no following birth. Cases which exceeded this duration were set to code 97 "Inconsistent". M7 The calculated months of amenorrhea gives the duration of amenorrhea as in M6, but with the duration calculated if the period did not return after the birth and before the following birth or the date of interview.

- M8 The duration of abstinence after the birth of the child in months. The maximum period allowed is calculated in the same way as for M6 and cases exceeding this duration are coded 97 "Inconsistent".
- M9 The calculated months of abstinence give the duration of abstinence as in M8, but with the duration calculated if the respondent was still abstaining after the birth.

#### Example Maternity History:

MIDX	M1	M2	MЗ	M4	M5	M6	М7	M8	М9
1	1	2	5	95	16	96	16	7	7
2	1	2	5	14	14	96	16	7	7
3	0	4	5	94	94	97	97	12	12
4	8	4	4	12	12	12	12	12	12

In this example, based on the birth history example, there are four entries representing the four children born in the last five years. The first two entries relate to twins and so all of their information is identical except for the breastfeeding data. The respondent received a tetanus injection, prenatal care from a trained nurse, and delivery assistance from a relative. One of the twins was still being breastfed, 16 months after the birth, while the other had stopped breastfeeding after 14 months. The respondent's period had not returned after the last birth and the repondent had abstained from sexual relations for 7 months after the birth. For child 3, no tetanus injection was given, prenatal care was from a traditional birth attendant and the child was delivered with the assistance of a relative. The child was never breastfed, the reported duration of amenorrhea was inconsistent with the interval between this birth and the birth after this, and the respondent abstained from sexual relations for 12 months after the birth of this child.

# Section 42 (REC42)

Var	Mode	<u>Description</u>
V401	А	Whether the last child was born by caesarean section. BASE: Respondents who have had one or more births (V201 > $0$ ).
V402		Whether a tetanus injection was given for the current pregnancy. BASE: Currently pregnant women (V213 = $1$ ).
V403		Type of person who the respondent saw for a pregnancy checkup for the current pregnancy. BASE: Currently pregnant women (V213 = $1$ ).
V404		Whether the respondent is currently breastfeeding any child. This is based on the entries in the maternity history for children born in the last five years. If no child was born in the last five years then the respondent is assumed not to be breastfeeding. This variable is created by looking for any child which is still being breastfed, and not just whether the last child is being breastfed.
V405		Whether the respondent is currently amenorrheic. This variable is created from the maternity history by checking if the period returned after the last birth. If the woman is currently pregnant then she is coded as not currently amenorrheic, irrespective of whether her period returned after the last birth. If there are no births in the last five years then this variable is coded 0 "Not currently amenorrheic."
V406		Whether the respondent is currently abstaining. This variable is created from the maternity history by checking if the respondent has resumed sexual relations since the last birth. If there are no births in the last five years then this variable is coded 0 "Not currently abstaining."
V407		Number of times the last child was breastfed during the previous night. BASE: Respondents still breastfeeding the last child (V404 = $1$ ).
V408		Number of times the last child was breastfed during the daylight hours the previous day. BASE: Respondents still breastfeeding the last child (V404 = $1$ ).
		Other foods given to the child in the last 24 hours.
V409		Plain water.
V410		Juice.
V411		Powdered milk.
V412		Cow's or goat's milk.
V413		Any other liquid.
V414		Any solid or mushy food. Variable V413 is used as a combined standard variable to catch all country specific liquids as well as the "Any other liquid" question from the questionnaire. If there are country specific liquids listed in the questionnaire, then these are included as country specific variables, together with the original question for "Any other liquid." BASE: Respondents still breastfeeding the last child (V404 = 1).
V415		Whether any of the liquids or solid foods was given in a bottle with a nipple. BASE: Respondents still breastfeeding the last child who fed the child with any other food or liquid in last 24 hours (V404 = 1 and (V409 = 1 or V410 = 1 or V411 = 1 or V412 = 1 or V413 = 1 or V414 = 1)).

- Whether the respondent has heard of a special named oral rehydration product for treating children with diarrhea.
  BASE: All respondents, as defined in the Model Questionnaires, although in many countries the question was only asked to respondents who had given birth to a child in the last five years.
- V417 Number of entries in the maternity history.
- V418 Number of entries in the health history.
- V419 Number of entries in the height and weight table.
- V420 Code assigned to the person measuring the children for the height and weight section. Codes are country specific.
- V421 Code assigned to the assistant measurer. Codes are country specific.

#### Section 43 (REC43)

The health history contains up to six entries, relating to living children born in the last five years. All living children born in the last five years, covering months 0 to 59 prior to the interview as for the maternity history, are included. The children who have died are not included in this section. If there are more than six living children born in the last five years then only the last six are included in the health history. See the example health history below.

- Var
   Model
   Description

   HIDX
   Index to the birth history. All living children born in the last five years have entries in this section. Children of multiple births each have their own entry as in the maternity history. There will be gaps in the numbering as dead children are excluded from the health history.
- H1 Whether the respondent has a health card for the child and whether she could produce it for the interviewer. Code 1 means the interviewer saw the health card for the child, whereas code 2 means the respondent reported she had a health card for the child but the interviewer did not see the health card. The health card is used to record the dates of vaccination of the children rather than relying on dates reported by the respondent.
- H2 Whether a date of vaccination was recorded on the health card for BCG. Code 1 means the child has a date recorded for the vaccination. In some countries code 2 is used to indicate that the respondent reported that the child had received the vaccination although the health card was not seen or did not exist. This is done in countries where the respondent was asked if the child had received each individual vaccination when the health card was not available. BASE: Usually the base is living children with health cards seen by the interviewer (H1 = 1), but in countries where the respondent reported whether the child had received the vaccination for each vaccination the base is all living children.
- H2D BCG vaccination date day.
- H2M BCG vaccination date month.
- H2Y BCG vaccination date year.

If the vaccination date reported is inconsistent with the date of birth or the date of interview or with the dates of other vaccinations part or all of the date of vaccination may be set to 97 "Inconsistent".

BASE: Children who have the vaccination recorded on the health card (H2= 1).

- H3 DPT 1 vaccination. As for H2, H2D, H2Y, H2M.
- H4 Polio 1 vaccination. As for H2, H2D, H2Y, H2M.
- H5 DPT 2 vaccination. As for H2, H2D, H2Y, H2M.
- H6 Polio 2 vaccination. As for H2, H2D, H2Y, H2M.
- H7 DPT 3 vaccination. As for H2, H2D, H2Y, H2M.
- H8 Polio 3 vaccination. As for H2, H2D, H2Y, H2M.
- H9 Measles vaccination. As for H2, H2D, H2Y, H2M.

H10 Whether the child ever received any vaccination to prevent him from getting diseases. This variable comes from a single question in the model questionnaires, which is used if the respondent does not have a health card for the child, and is <u>not</u> a summary of the preceding variables. In countries where the respondent was asked vaccination by vaccination whether the child had received a vaccination this variable is blank. BASE: Children whose mother could not produce a health card (H1 = 0 or 2).

#### Diarrhea

Variables H11 to H21 relate to the prevalence and treatment of diarrhea. BASE: All living children born in the last five years for H11, and children having an episode of diarrhea in the last two weeks (H11 = 1 or 2) for H12 o H21.

Var	Model Description
H11	Whether the child had diarrhea in the last 24 hours or within the last two weeks.
H12	The person providing medical treatment for the last episode of diarrhea. Codes are country specific.
H13	Whether the child received a sugar-salt-water solution from a special packet (ORS).
H14	Whether the child was given the home solution of sugar, salt and water.
H15	Whether the child was given tablets, injections or syrups.
H16	Whether the child was given an increase in fluids.
H17	Whether the child received a decrease in fluids.
H18	Whether the child was given an increase in foods.
H19	Whether the child received a decrease in foods.
H20	Whether the child received any other treatment. This is a summary of the "other treatment" question in the questionnaire and any country specific treatments. All country specific treatments are included as country specific variables as is the original "other treatment" variable
H21	Whether the child received any treatment. This is a summary of all of the preceding variables

#### Fever

Variables H22 to H30 relate to the prevalence and treatment of fever. BASE: All living children born in the last five years for H22, and children suffering from fever in the last four weeks for H23 to H30 (H22 = 1).

<u>Var</u> <u>Model</u> <u>Description</u>

H12 to H20.

- H22 B Whether the child had fever in the last four weeks.
- H23 B The person providing medical treatment for the last episode of fever. Codes are country specific.

- H24 B Whether the child was given antimalarial.
- H25 B Whether the child was given antibiotics.
- H26 B Whether the child was given liquids or syrups.
- H27 B Whether the child was given aspirin.
- H28 B Whether the child was given an injection.
- H29 B Whether the child received any other treatment. This is a summary of the "other treatment" question in the questionnaire and any country specific treatments. All country specific treatments are included as country specific variables as is the original "other treatment" variable.
- H30 B Whether the child received any treatment. This is a summary of all of the preceding variables H23 to H29.

#### Cough/Breathing Difficulties

Variables H31 to H38 relate to the prevalence and treatment of respiratory difficulties. BASE: All living children born in the last five years for H31, and children having an episode of cough or breathing difficulties in the last four weeks (H31 = 1).

- H31 B Whether the child had suffered from a cough or had breathing difficulties in the last four weeks.
- H32 B The person providing medical treatment for the last episode of cough or breathing difficulties. Codes are country specific.
- H33 B Whether the child was given antibiotics.
- H34 Whether the child was given cough syrup.
- H35 Whether the child was given pills.
- H36 Whether the child was given an injection.

H37 Whether the child received any other treatment. This is a summary of the "other treatment" question in the questionnaire and any country specific treatments. All country specific treatments are included as country specific variables as is the original "other treatment" variable.
H38 Whether the child received any treatment. This is a summary of all of the preceding variables H32 to H37.

#### Example Health History:

HIDX	1	2	4
H1	1	1	2
H2	1 27 05 87	1 27 05 87	
HЗ	1 24 06 87	1 24 06 87	
H4	1 24 06 87	1 24 06 87	
Н5	1 22 07 87	1 22 07 87	
Нб	1 22 07 87	1 22 07 87	
H7	0	0	
H8	0	0	
Н9	0	0	
H10			1
H11	2	0	0
H12	1		
H13	0		
H14-H21	00100001		
H22	0	0	1
H23			0
H24-H30			1000001
H31	0	1	0
H32		0	
НЗЗ-НЗ8		00000	

In this example, based on the birth history example, there are three entries representing the three living children born in the last five years and one child who died. The first two entries are twins. They both have

a health card and have dates reported for BCG, DPT 1 & 2, and Polio 1 & 2 vaccinations, but not DPT3, Polio 3 or Measles. The other child has a health card which the respondent could not produce; the child had received some vaccination according to the respondent. The first child listed had an episode of diarrhea in the two weeks prior to the interview, visited a private doctor (assuming the coding of the model "B" questionnaire), and the mother treated the child by increasing the quantity of fluids the child was given. The second child had a cough or breathing difficulties in the four weeks prior to the interview, and was treated by the mother with antimalarial.

#### Section 44 (REC44)

The height and weight table contains information relating to living children born in a specified period prior to the interview. The period used iscountry specific, but is usually 3 to 36 months prior to interview. In some countries the period is 0 to 36 months, 3 to 60 months or 0 to 60 months. The entries are in reverse order, such that the youngest child is reported first.

- Var Model Description
- HWIDX Index to the birth history. All living children born in the specified period have entries in this section.
- HW1 Age in months of the child is calculated from the country month code of the date of interview less the century month code of the date of birth of the child.
- HW2 Weight in kilograms. There is one implied decimal place in the weight (decimal points are not included in the data file). To produce the weight in kilograms divide by 10.
- HW3 Height in centimeters. There is one implied decimal place in the height (decimal points are not included in the data file). To produce the height in centimeters divide by 10. The height of the child is actually the recumbent length of the child in most surveys. In surveys that include children born up tp 60 months before the interview, height is the recumbent length for children less than 24 months old and standing height for children born 24 or more months prior to the interview.
- HW4 Height for Age percentile.
- HW5 Height for Age standard deviations from the reference median.
- HW6 Height for Age percent of reference median.
- HW7 Weight for Age percentile.
- HW8 Weight for Age standard deviations from the reference median.
- HW9 Weight for Age percent of reference median.
- HW10 Weight for Height percentile.
- HW11 Weight for Height standard deviations from the reference median.
- HW12 Weight for Height percent of reference median.

The measures above were calculated using the CDC Standard Deviation-derived Growth Reference Curves derived from the NCHS/FELS/CDC Reference Population. The measures are presented with two implied decimal places (no decimal points are included in the data file). To produce the actual measure, divide the variable by 100. If either the weight or the height of the child is missing then all of the above measures are set to the missing code 9999 or 999999. If either the height or the weight is outside of the acceptable range for the calculation of these measures then all of the above measures is set to code 9998 or 99998.

HW13 Reason the child was not measured. Codes are country specific. BASE: Children not measured (HW2 = 999 and HW3 = 9999).

#### Example Height and Weight Table:

HWIDX	HW1	HW2	НWЗ	HW4	HW5	HW6	HW7	HW8	HW9	HW10	HW11	HW12	HW13
1	15	96	762	1289	-113	9595	1217	-117	8829	2735	- 6	9514	
2	15	94	741	1064	-125	9527	2244	-76	9174	5033	1	10007	

In this example, based on the birth history example, two children are included (assuming the period for inclusion was 3 to 36 momths). The first two children are twins aged 15 months, measuring 9.6 kg & 76.2 cm and 9.4 kg and 74.1 cm, respectively. Their anthropometric measures are given to 2 implied decimal places.

#### Section 51 (REC51)

<u>Var</u>	Mode	<u>1</u> <u>Description</u>
V501		Current marital status of the respondent.
V502		Whether the respondent is currently, formerly or never married (or lived with a partner). Currently married includes married women and women living with a partner, and formerly married includes widowed, divorced, separated women and women who have lived with a partner but are not now living with a partner.
V503		Whether the respondent has been married or lived with a man once or more than once. BASE: Ever-married women (V501 $< > 0$ ).
V504	В	Whether the husband lives in the household or is now living elsewhere. BASE: Currently married women (V502 = $1$ ).
V505	В	Whether the respondent is in a polygynous union and the number of other wives the respondent's partner currently has. BASE: Currently married women (V502 = $1$ ).
V506	В	The rank of the respondent among the partner's wives. BASE: Currently married women in a polygynous union (V502 = $1 \& V505 > 0$ ).
<u>First n</u>	arriage	or union
	Varial BASE	bles V507 to V513 relate to the date of start of the first marriage or union. E: Ever-married women (V501 $< > 0$ ).
V507		Month of start of first marriage or union (see note on imputed dates).
V508		Year of start of first marriage or union (see note on imputed dates).
V509		Century month code of the date of start of first marriage or union (see note on century month codes).

- V510 Completeness of information for the date of start of the first marriage or union (see note on imputed dates).
- V511 Age at start of first marriage or union is calculated from the century month code of the date of start of first marriage or union and the century month code of the date of birth of the respondent.
- V512 Years since start of first marriage or union is calculated from the century month code of the start of first marriage or union and the century month code of the date of interview.
- V513 Marital duration is actually the time since the start of the first marriage or union until the date of interview grouped into five year groups, irrespective of whether the respondent is still married to her first partner.

Variables V514 to V524 relate to the survival status of the respondent's parents and her first partner's parents and to the living arrangements after marriage. BASE: Ever-married women (V501 < > 0).

Var	Model Description
V514	Whether the respondent's mother was still alive at the date of interview.
V515	Whether the respondent's father was still alive at the date of interview.
V516	Whether the respondent's first partner's mother was still alive at the date of interview.
V517	Whether the respondent's first partner's father was still alive at the date of interview.
V518	Whether the respondent's mother was alive at the date of start of first marriage or union.
V519	Whether the respondent's father was alive at the date of start of first marriage or union.
V520	Whether the respondent's first partner's mother was alive at the date of first marriage or union.
V521	Whether the respondent's first partner's father was alive at the date of first marriage or union.
V522	The number of years the respondent and her first partner lived with one of their parents after the start of the first marriage or union.
	BASE: Respondents for whom one of the parents was alive at the date of the first marriage or union (V518 = 1 or V519 = 1 or V520 = 1 or V521 = 1).
V523	Whether the respondent and her partner are now living with one of their parents. BASE: Respondents for whom one of the parents was alive at the date of the first marriage or union (V518 = 1 or V519 = 1 or V520 = 1 or V521 = 1).
V524	Number of localities lived in for six months or more since the date of start of first marriage or union.

#### Sexual intercourse

Variables V525 to V528 relate to age at first intercourse, frequency of intercourse and time since last sexual relations.

<u>Var</u> V525	ModelDescriptionAge at first sexual intercourse.Respondents who had never had sex are coded 0.
V526	Number of times the respondent had sexual intercourse in the four weeks preceding the interview. BASE: Respondents who have had sexual intercourse (V525 $< > 0$ ).
V527	Time since the last sexual relations as reported by the respondent. The first digit gives the units in which the respondent gave her answer, with 9 meaning a special answer was given. The last two digits give the time in the units given. Any value for time greater than 90 is a special answer. BASE: Respondents who have had sexual intercourse (V525 $< > 0$ ).
V528	Time since the last sexual intercourse in days is calculated from the preceding variable. Durations of more than 30 days are grouped into one category $31+$ . If the respondent said she had had sexual relations in the last four weeks, but replied that her last sexual intercourse was one month before the interview, then this is recoded to 30 days. Otherwise, one month is coded $31+$ days.

BASE: Respondents who have had sexual intercourse (V525 < > 0).

### Section 61 (REC61)

#### <u>Var</u> <u>Model</u> <u>Description</u>

- V601 A Fertility preferences and certainty of the preferences. This variable is created from a series of questions in the Model "A" questionnaire. Firstly, a question relating to the respondent's desire for a future birth is asked. For each possible response to this question a second question is asked, further classifying the responses to produce nine categories (1-7,12,99). If the respondent is sterilized then a separate series of questions are asked leading to four categories (8-11). The code missing is used only if the answer to the first question on fertility preferences is missing. If the response missing is used for one of the secondary questions then this is coded with the "Unsure" category for that question. Similarly, if the response is missing for the question relating to regret for the sterilization then code 11 is used. BASE: Currently married women (V502 = 1).
- V602 Fertility preferences. This is created in different ways depending upon whether the model "A" questionnaire or the model "B" questionnaire was used in the country. In the first case the variable is created by grouping the codes from V601. In the second case the variable is created directly from the single question asked in the model "B" questionnaire. BASE: Currently married women (V502 = 1).
- V603 Preferred waiting time before the birth of another child is givev as reported by the respondent. If the respondent answered "Don't know" when she was asked how long she would like to wait for her next child, then she was asked how old she would like her youngest child to be when the next child is born, and the response to this is converted into a number of years before the next child is wanted. If the respondent replied that she had no children to the second question, then the variable is set to missing. In some countries there may be some additional non-numeric responses such as "Wants immediately" to the question of how long to wait before the next birth. These are assigned additional codes on a country specific basis. BASE: Currently married (V502 = 1).
- V604 The preferred waiting time to the next birth is grouped into 12 month categories with responses of more than six years coded as 6+ years. Inconsistent and non-numeric responses are coded into one group (7 "Non-numeric"), but with "Don't know" and missing responses in their own categories (8 & 9). In the example above of the additional response "Wants immediately," this non-numeric code is not grouped with the other non-numeric codes, but is recoded as less than one year waiting time.

BASE: Currently married women (V502 = 1).

- V605 Desire for more children is a constructed variable classifying respondents who want more children by whether they want the next child soon (less than 2 years) or they want the next child later (2+ years).
   BASE: Currently married women (V502 = 1).
- V606Respondent's attitude towards becoming pregnant.BASE: Non-pregnant women not currently using contraception who have had sexual intercoursesince their last birth (V213 = 0 & V312 = 0 & V526 < > 0 & V527 < > 996).
- V607 For those women who would not be happy if they became pregnant, the main reason they are not using contraception. Codes are country specific. BASE: Women who would not be happy if they became pregnant (V606 < > blank & V606 < > 1).
- V608 B Ideal duration for a couple to wait before starting sexual relations after the birth of a child. The first digit gives the units in which the respondent answered, while the last two digits give the time in those units. If the units value is 9 then the variable contains a special response, and if the duration value is greater than 90 this also indicates a special response. For example, code 996 is used for "other" answers, and code 299 would mean that the response was given in years but the actual duration was missing on the questionnaire. BASE: Currently married women (V502 = 1).
- V609 B Whether a mother should completely stop breastfeeding before starting to have sexual relations after a birth.
   BASE: Currently married women (V502 = 1).
- V610 B Whether the respondent thinks her partner approves of couples using a method to avoid pregnancy.
   BASE: Currently married women (V502 = 1).
- V611 B How often the respondent discussed family planning with her partner in the past year. BASE: Currently married women (V502 = 1).
- V612 B Whether the respondent approves, in general, of couples using a method to avoid pregnancy.
- V613 The ideal number of children that the respondent would have liked to have in her whole life, irrespective of the number she already has. In many countries it was possible for a respondent to reply to this question with a range of values, in which case this variable contains the midpoint between these values. If the midpoint is not an exact number then the number is rounded up in half the cases and rounded down for the other half. In situations where a range of values was collected, the original variables are included as country specific variables. In some countries, additional country specific categories are included, such as "It depends on God" or "As many as I can support" and are given country specific codes.
- V614 This variable groups the preceding variable such that 6 or more children are in one category 6+ and all non-numeric responses are coded 7.

# Section 71 (REC71)

Var	Model Description
V701	The current or most recent husband or partner's highest level of education attended. See variable V106.
	BASE: Ever-married women (V501 $< > 0$ ).
V702	Highest year of education gives the years of education completed at the level given in V701. BASE: Ever-married women except those answering "No education" or with missing data for V701 (V501 $< > 0 \& V701 < > 0 \& V701 < > 9$ ).
V703	Literacy of the respondent's current or last partner. See variable V108. BASE: Ever-married women (V501 $< > 0$ ).
V704	Current or last husband or partner's most recent occupation as collected in the country. Codes are country specific. Base: Ever-married women (V501 $< > 0$ ).
V705	Standardized husband's occupation groups. Agricultural categories also include fishermen, foresters and hunters and are <u>not</u> the basis for selection of agricultural/non-agricultural workers for the variables that follow. This selection is on a country specific basis, based on the detailed coding scheme in variable V704. BASE: Ever-married women (V501 $< >$ 0).
V706	Whether the husband/partner earns or earned a regular wage or salary. BASE: Ever-married women whose partner works or worked in a non-agricultural occupation (V501 <> 0 & V704 <> country specific agricultural category).
V707	Whether the husband/partner works on his own/family land or on someone else's land. BASE: Ever-married women whose partner works or worked in an agricultural occupation (V501 < > 0 & V704 = country specific agricultural category).
V708	Whether husband/partner worked on someone else's land mainly for money or for a share of the crops. BASE: Ever-married women whose partner works or worked in agriculture on someone else's land (V707 = $0$ ).
V709	Whether the respondent worked before her first marriage. BASE: Ever-married women (V501 = $1$ ).
V710	Whether the respondent turned most of her money over to her family or kept it for herself, when she worked before her marriage. BASE: Ever-married women who worked before marriage (V709 = $1$ ).
V711	Whether the respondent worked after her first marriage. BASE: Ever-married women (V501 = $0$ ).
V712	Whether the respondent has ever worked, for never-married women. BASE: Never-married women (V501 = $0$ ).
V713	Whether the respondent turned most of her money over to her family or kept it for herself, when she worked.

BASE: Never-married women who have ever worked (V712 = 1).

Var	Model	Descri	ption

- V714 Whether the respondent is currently working.
- V715 Most recent husband or partner's education in single years. See variable V133. BASE: Ever-married women (V501 < > 0).

# Section 81 (REC81)

Var	Model	Description
V801		Time of start of the interview. The first two digits give the time in hours using the 24-hour clock, and the last two digits give the minutes within that hour.
V802		Time of end of interview is coded as for the start of interview.
V803		Length of interview in minutes is calculated from the previous two variables, but with interviews that required more than one visit being coded 96.
V804		Number of visits for the interview.
V805		Interviewer identification code. Codes are country specific.
V806		Data entry keyer code. Codes are country specific.
V807 V808 V809 V810		Presence of children aged under 10 at the reproduction section of the interview. Presence of the husband at the end of the reproduction section of the interview. Presence of other males at the end of the reproduction section of the interview. Presence of other females at the end of the reproduction section of the interview.
V811 V812 V813 V814		Presence of children aged under 10 at the end of the marriage section of the interview. Presence of the husband at the end of the marriage section of the interview. Presence of other males at the end of the marriage section of the interview. Presence of other females at the end of the marriage section of the interview.

# Sections 91-99 (REC91-REC99)

The following sections will appear in the recode data file as needed on a country specific variable.

REC91	All single occurrence country specific variables relating to the respondent.
REC92	Country specific variables from the birth history (REC21). Variable IDX92 is always included as the first variable in this section and is equal to BIDX for each entry in the birth history.
REC93	Country specific variables from the contraceptive practice history (REC33). Variable IDX93 is always included as the first variable in this section and is equal to CPIDX for each entry in the contraceptive practice history.
REC94	Country specific variables from the maternity history (REC41). Variable IDX94 is always included as the first variable in this section and is equal to MIDX for each entry in the maternity history.
REC95	Country specific variables from the health history (REC43). Variable IDX95 is always included as the first variable in this section and is equal to HIDX for each entry in the health history.
REC96	Country specific variables from the height and weight table (REC44). Variable IDX96 is always included as the first variable in this section and is equal to HWIDX for each entry in the height and weight table.
REC97-99	The last three country specific sections are not assigned to any particular section of the questionnaire, but are used for additional modules not usually incorporated in the questionnaires. These include the respondent's work history, the diagnoses of deaths for dead children who

were born in the five years preceding the interview, or for husband's questionnaires.

# **Dictionary Listing**

The dictionary listing provides the basic information relating to each variable in the data file. The dictionary listing provided here is for rectangular and hierarchical data files. It contains a description of all of the standard variables included in the recode file. The first page gives dictionary information about the file, including the name of the dictionary, its creation date and last modification date, the questionnaire identification fields and the section identification fields. this is followed by the section descriptions giving the following information:

Section name	Name by which the section is referred.
Code	Code used to identify the record for this section.
Length	Number of characters used in the record.
Class	Whether the section is a single (S) or multiple (M) section.
Occurs	Minimum and maximum number of occurrences allowed for the section. If the maximum is greater than one then the section is a multiple section, but if the
	maximum is one then the section is a single section. If the minimum number of occurrences is zero then the section is not always required for every case.
Group	Maximum number of occurrences of a group within a single section, the starting location of the group within the section and the total length of all of the variables in one occurrence of the group.
Section label	Title for the section.

This is followed by the detailed description of each variable in the data file, section by section. The following information is provided for each variable:

Variable name	Name by which the variable is referred.
Location	Character position on the record.
Length	Size of the variable in characters.
Decimals	Number of decimal places in the variable. If decimal places are specified then the variable is stored with the decimal point in the data file. For example, if a variable is 4 characters in size, with 2 decimal places the variable will appear as X.XX in the data file.
Format	N is for numeric, A for alphabetic.
Class	S is for single variables in single or multiple sections, M for multiple variables of a group in single sections.
Variable label	Title of the variable.
Value labels	Labels assigned to each code for the variable.
Ranges	Pairs of values giving the lower and upper limits for the values of the variable.

The dictionary listing following is for the hierarchical data structure. The rectangular data structure has exactly the same format, but with the minimum number of occurrences of each section equal to the maximum number of occurrences of the section. The flat file data structure contains the same variables, but with all variables on one record. The locations of each variable can be calculated by concatenating all of the records end to end, but leaving out the section identification from all records and the respondent identification from all sections except the first.