

ORIGINAL RESEARCH

Women in Montenegro exhibit a high degree of happiness and life satisfaction: Data from the Multiple Independent Cluster Survey 2018

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Abstract

Aim: Montenegrin government is increasingly aware of the key role of women in the society and attempts to improve social cohesion among Montenegrin people. Precondition is a high degree of life satisfaction and happiness.

Methods: We used the Multiple Indicator Cluster Survey (MICS) of 2018 to analyse the distribution and interaction of 22 potential determinants out of 383 variables available. The participation rate was 77.7 or 2,276 women aged 15-49 years out of 2,928 invited. As data quality turned out to be limited, we employed a data mining approach, i.e. an interactive Classification and Regression Tree (C&RT). Happiness was measured ranging from very happy to very unhappy on a categorical scale of 5 steps

Results: Of all Montenegrin women 70.7% declared themselves as very happy. Likewise, a 10-point scale of life satisfaction classifies 82.0% of the sample in the top ranks 8-10. Furthermore, 73.6% of the women expect the next year to be even better. Wealth, younger age, and marriage or living in union determine the status of happiness.

Conclusion: Women in Montenegro exhibit a high degree of self-reported happiness and life satisfaction. Montenegrin policies should continue to support the role of women in the society.

Keywords: happiness, life satisfaction, MICS, Montenegro, women.

Conflicts of interest: None declared.



Introduction

Building up its own institutions and services, Montenegro is striving to advance human capital development and increase internationalization and visibility (1). During the last years, Montenegrin government became increasingly aware that the role of women in the society has to get priority in order to develop successful strategies to improve the social cohesion in the Montenegrin society (2). Inclined to Diener et al., (3) a positive social web may have three components, happiness related to moods, but frequently a consequence of life satisfaction (evaluative happiness (4)) or in other words subjective (and objective) success in life including social acknowledgement, and well-being as a consequence of both (5) and feeling secure as related to the social environment. We prefer to follow this use of the terminology although some authors understand happiness and life satisfaction as synonyms (6). Others make a clear distinction (7,8). For Nemati et al. (9) life satisfaction is a factor that influences both happiness and resilience. Resilience on its part has an influence on happiness. Determinants that possibly contribute to happiness according to e.g. Galletta (10) or Graham (11) are mostly seen in the categories of socio-demography, location of birth/residence, and wealth (12).

As Montenegro is a small country of less than one million inhabitants and limited resources, the last Multiple Indicator Cluster Survey, executed by the Statistical Office of Montenegro (13) provides a good opportunity to interpret the information available regarding the position and role of women in the Montenegrin society. Our paper therefore tries to identify politically meaningful determinants of "Happiness" and "Life satisfaction" of the female population which would allow the

government to further improve their stabilising role in the Montenegrin society.

Methods

The database of the Multiple Indicator Cluster Survey Montenegro in (MICS) (13) includes the file 'wm.sav' referring to 2018 with 2,928 women 15-49 years of age. The response rate was 77.7% or 2.276 women who participated in the highly standardized interview employed, 99.8% of the interviews executed from October to December 2018. However, in the protocols of the interviews several variables show a very high rate of non-response and therefore had to be eliminated from further consideration (we decided on a minimum response level of >=50% for a variable to be included). From the 383 variables available in the data file N = 22, listed in Table 1, part I remained as relevant to have a potential impact on "happiness" respectively "life satisfaction" in other words are of "cultural relevance" and have a sufficiently high response rate. The 4 variables referring to happiness and life satisfaction (together understood as well-being) are listed in Table 1, part II.

Because of their high potential relevance we employed for two variables with a relatively high percentage of missing values (M7 - Married or lived with a man once or more than once and WAGEM - Age at first marriage/union of woman) a MD imputation using a k-NN approach (14) to estimate missing values. The k-Nearest Neighbours is an algorithm that is used for simple classification. The algorithm uses 'feature similarity' to predict the values of any new data points. This means that the new point is assigned a value based on how closely it resembles the points in the training set (15). Several other indicators of high interest as for example "Age at



first sexual intercourse" could not be used, either because of an identified non-response rate of mostly >80% or because of a monocategorical formulation of the interview question (a complete table with all variables considered including those eliminated is attached as Annex). Nevertheless, the 26 variables selected in Table 1 cover the categories mentioned above but their quality does not fully satisfy the suitability requirements for further statistical processing like multiple regression techniques. Therefore, we employ a data mining approach, i.e. an interactive Classification and Regression Tree (iC&RT) (14). This tree allows to analyse what-if-scenarios either by automatic splitting or manually according to specific research questions. In 1984 Breiman (16) used a C&RT algorithm to identify high-risk patients, today it is also used to identify specific customers.

The result of the analysis is then shown as a tree. At the various levels and nodes of the

tree selected variables are used to split the data pool. A C&RT approach uses automatic (algorithmic) methods, user-defined rules and criteria specified with the help of a highly interactive graphical user interface (brushing tools). With this approach it is possible to provide an interactive environment for building classification or regression trees (via classic C&RT methods or a Chi-square Automatic Interaction Detector (CHAID)) to enable users to try various predictors and split criteria. This allows to bring in expert knowledge of the researchers, instead of following only an automatic procedure. To evaluate the quality or appropriateness of the classification outcomes, several tools can be applied (14,15).

Table 1. Selection of the 26 most relevant variables from the MICS database (UNICEF 2019) having a sufficiently high response rate, at least bi-categorical answers, and missing values below 50% (full list in Annex)

Line numbers	Variable Code	Long name	Variable format	Missing values
11	WM6M	Month of interview 2019	Cat.	none
30	WB4	Age of woman	Quant.	22.26% missing values
32	WB6A	Highest level of school attended	cat.	23.4% missing values
42	WB15	Duration of living in current place	Quant.	22.26% missing values
45	CM1	Ever given birth	cat.	22.27% missing values
46	CM2	Any sons or daughters living with you	cat.	45.28% missing values
49	CM5	Any sons or daughters not living with you	cat.	45.29% missing values
191	CP3	Ever used a method to avoid preg- nancy	cat.	34.4% missing values
229	UN17	Availability of private place for washing during last menstrual period	cat.	26.33% missing values
234	DV1C	If she argues with husband: wife beating justified	cat.	22.26% missing values



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235	DV1D	If she refuses sex with husband: wife beating justified	cat.	22.26% missing values
236	DV1E	If she burns the food: wife beating justified	cat.	22.27% missing values
259	VT20	Feeling safe walking alone in	cat.	22.27% missing values
	1120	neighbourhood after dark		22127 /o missing values
260	VT21	Feeling safe at home alone after	cat.	22.27% missing values
		dark		6
268	MA1	Currently married or living with a	cat.	22.27% missing values
		man		
272	MA7	Married or lived with a man once	cat.	42.69% missing values
		or more than once		9
294	HA1	Ever heard of HIV or AIDS	cat.	22.27% missing values
325	HA31	Children living with HIV should	cat.	26.47% missing values
		be allowed to attend school with		8
		other children		
331	IA1	Do any vaccines cause serious ad-	cat.	22.27% missing values
		verse reactions after vaccination		
351	WAGE	Age-class 15-19, 20-24	Quant. & cat.	22.27% missing values
353	WAGEM	Age at first marriage/union of	Quant.	42.69% missing values
		woman		<u> </u>
369	HH7	Region	cat.	none
373	Windex10	Wealth index Decile	Quant. & cat.	mixture of category and numbers
				nume or p
Part II:	Happiness and Life S	atisfaction		
345	LS1-cat	Estimation of overall happiness	Quant. & cat.	22.27% missing values/ no
		••		response as category
346	LS2	Satisfaction with ladder step	Quant. & cat.	22.27% missing values / no
		•		response as category
347	LS3	Life satisfaction in comparison	cat.	22.27% missing values / no
		with last year		response as category
348	LS4	Life satisfaction expectation one	cat.	22.27% missing values / no
		year from now		response as category

Results

The descriptive Table 2 shows the distribution of the selected variables potentially determining happiness and life satisfaction. With the exception of variables 5, 6, 9, 16, and 18 in Table 2, missing values count for <800 or <27.3% out of a grand total of N = 2.928. Variable 3 covering the 'Highest level of school attended' points to a relatively well educated population with 55.1% having attended the secondary level and 33.1% levels higher than that, together 88.2%. This corresponds to a stable population where only 23.6% live at the present location for less than 15 years (variable 4); likewise, 98.1%

indicate children living in the same household (variable 5), however, with a high number of missing answers, presumably being due to a large part of women without children as 29.6% indicate to have never given birth (variable 8). Households seem to be well established as almost all women (97.7%) indicate that they have a private place for washing during the last menstrual period (Variable 7). For a relatively traditional society speaks that 87.9% deny - or may be too reluctant to admit - to have used birth control methods ever (variable 9). However, if it comes to violence in the family the position is very clear: more than 98.4%% of females do not accept



to be beaten by the husband (variables 10, 11 and 12). Although only 39.2% live in rural areas (variable 13) 86.0% feel safe walking alone in the neighbourhood after dark (variable 14) and 94.7% feel safe alone at home (variable 15). In 64.4% age at first marriage is between 15 and 25 years of age (variable 16) and 69.3% are currently married or live with a man (variable 17); almost all (96.1%) live in marriage or union only once (variable 18). Almost all (variable 19) have heard of

HIV/AIDS (95.0%), however, regarding the question, whether children with HIV should be allowed to attend school (variable 20) 32.7% say "No". Likewise, the opinion about vaccines (variable 21) is somewhat divided as 19.8% believe that vaccines could cause serious adverse reactions. The Wealth Index - potentially of considerable impact – distributes quite evenly throughout the Montenegrin population (variable 22).

Table 2. Distribution of the variables listed in Table 1, part I (N=22)

Name of variable and categories*	Number	Percentage	Missing
Women 15-49, grand total	2.928		
7.6			
1) Month of interview 2019 (WM6M)			
January	5	0.2	
October	1212	41.4	
November	1219	41.6	
December	492	16.8	
	2928	100.0	none
2) Age (WB4)			
15-24	501	22.0	
25-34	769	33.8	
35-49	1,006	44.2	
15-49	2276	100.0	652
3) Schooling (WB6A)			
Primary	264	11.8	
Secondary	1,235	55.1	
Higher	743	33.1	
6 '	2.242	100.0	686
4) Residence (WB15)			
Since birth	1.370	60.2	
>15 years	370	16.3	
<15 years	536	23.6	
•	2.276	100.0	652
5) Children who are living with you (CM2)			
Yes	1.572	98.1	
No	30	1.9	
	1.602	100.0	1326
6) Children who are not living with you (CM5)			
Yes	170	10.6	
No	1,432	89.4	
	1,602	100.0	1326
7) Private place for washing (UN17)			
Yes	2,102	97.7	
No	50	2.3	



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	2,152	100.0	776
8) Ever given birth (CM1)	2,132	100.0	770
Yes	1,602	70.4	
No	674	29.6	
	2,276	100.0	652
9) Ever used birth control methods(CP3)			
Yes	230	12.1	
No	1.675	87.9	
	1.905	100.0	1.023
10) Beating by husband justified if she refuses sex (DV1D)			
Yes	21	0.9	
No	2.232	99.1	
	2.253	100.0	675
11) Beating by husband justified if she burns food (DV1E)			
Yes	20	0.9	
No	2,239	99.1	
	2,259	100.0	669
12) Beating by husband justified if she argues(DV1C)	2=		
YES	37	1.6	
NO	2,210	98.4	601
40) 4 11 1 (77775)	2,928	100.0	681
13) Area living (HH7)	1770	60.0	
Urban	1779	60.8	
Rural	1149	39.2	0
14) F I' (3/720)	2,928	100.0	0
14) Feeling safe walking alone (VT20) Yes	1.952	86.0	
No	319	14.0	
110	2.271	100.0	657
15) Feeling safe at home alone (VT20)	2.2/1	100.0	037
Very safe	1,123	49.9	
Safe	1,008	44.8	
Unsafe	119	5.3	
	2,250	100.0	678
16) Age at first marriage (WAGEM)	,		
10-14	21	1.3	
15-24	1.081	64.4	
25-34	527	31.4	
35-49	49	2.9	
	1.678	100.0	1.250
17) Currently married or living with a man (MA1)			
Yes	1.575	69.3	
No	699	30.7	
	2.274	100.0	654
18) Married or lived in Union (MA7)			
Only once	1,623	96.9	
More than once	52	3.1	
10. 7	1,675	100.0	1,250
19) Ever heard of HIV/AIDS (HA1)	21.52	05.0	
Yes	2153	95.0	
No	114	5.0	661
	2267	100,0	661



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20) Children with HIV should attend school (HA31)			
Yes	978	45.9	
No	698	32.7	
Depends	457	21.4	
	2.133	100.0	795
21) Vaccines cause serious adverse reactions (IA1)			
Yes	449	19.8	
No	1.360	60.0	
No opinion	456	20.1	
•	2.265	100.0	663
22) Wealth Index Deciles (windex10)			
1. Decile	199	8.7	
2. Decile	217	9.6	
3. Decile	240	10.5	
4. Decile	218	9.6	
5. Decile	237	10.4	
6. Decile	235	10.3	
7. Decile	237	10.4	
8. Decile	262	11.5	
9. Decile	225	9.9	
10. Decile	206	9.1	
	2.276	100.0	652

^{*} Names of variables abbreviated, Codes in brackets.

Life satisfaction was asked with a retrospective and a prospective projection of one year. Life satisfaction relates to criteria like ranking according to income and social status whereas happiness has an emotional connotation. Table 3 classifies life satisfaction in the upper third of a 10-point scale (ranks 8, 9, and 10) with N=1.773 or 82.0%. However, with regard to the foregoing year only 46.8% or 1062 women consider it as better than the present one but on the other hand even 73.6% expect that regarding the next year.

Table 3. Frequency distribution of life satisfaction (LS2-4)

Present levels	Number	Percentage
0-4	34	1.2
5-7	463	16.8
8-10 (highest)	1.773	82.0
Total	2.270	100,0
Levels last year		
Worse	82	3.6
About the same	1.124	49.6
Better	1.062	46.8
Total	2.268	100.0
Levels next year		
Worse	14	0.6
About the same	580	25.8
Better	1656	73.6
Total	2250	100.0



Happiness was measured in the survey on a categorical scale with 5 steps (variable ranging from very happy to very unhappy). The interviewers asked to tick the appropriate category in the questionnaire. According to the data in Table 4, 96.7% of females 15-49 in Montenegro are very or somewhat happy.

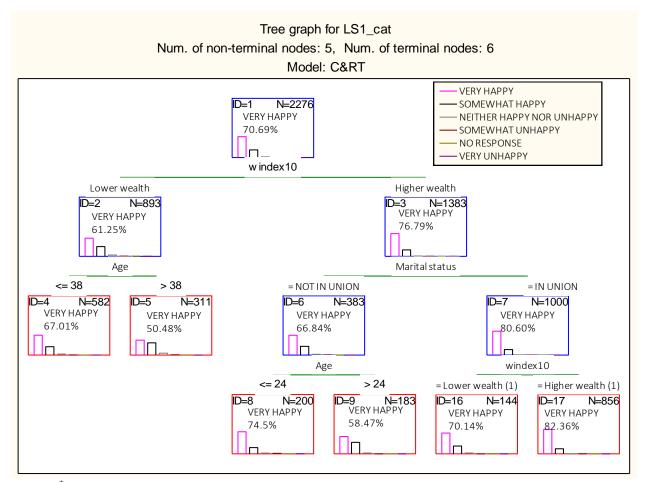
Categories Number Percentage 1609 70.7 Very happy Somewhat happy 592 26.0 Neither nor 57 2.5 Somewhat unhappy 10 0.4 Very unhappy 3 0.1 5 No response 0.2 2276 100.0 Total

Table 4. Frequency distribution of Happiness (LS1)

The result of the C&RT analysis of likely determinants of happiness is shown in Figure 1 below. From this tree we can induce general rules to predict who is likely to be very happy. The splitting process creates three levels of splitting. At each level the starting pool of the survey population is divided by predictors, i.e., variables that allow to break down the rating of happiness by expected variables of influence. At the first level 70.7% of the interviewed women according to their answers are very happy and 26.1% are somewhat happy. These figures seem to be relatively high, but change when breaking down the numbers by splitting variables. The 2,276 interviewees are split first according to their level of wealth. This level of wealth (windex10) groups the interviewees into deciles. In the tree 893 women belong to the category of lower wealth. For splitting the following categories of lower wealth were used according to their relevance in this specific population: 2nd, 5th, 3rd and 1st deciles. The variable level of wealth contributes most to the grouping of the interviewees; nevertheless, the remaining variables were also taken into account, but with less importance. In this group

of lower wealth 61.3% are very happy and 32.9% somewhat happy. In the richer category with 1,383 women, 76.8% are very happy and 21.6% somewhat happy. If one splits then the group of lower wealth further by the age of women (WB4), from the 582 women in the age of 38 or younger 67.0% are very happy and 28.4% are somewhat happy, whereas in the group of 311 women that are older than 38 years 50.5% are very happy and 41.5% are somewhat happy. To characterise the better off group of 1,383 women, which is according to relevance described by 6th, 4th, 9th, 10th, 7th and 8th wealth deciles, the software splits it according to marital status respectively living in union: 383 women not living in union 66.8% are very happy. They split according to age into 200 women <=24 (74.5% very happy) and 183 women >24 (58.5% very happy). Of those 1,000 women living in union 80.6% are very happy. They split into 144 women of (relatively) lower wealth - 70.1% of them being very happy and into 856 of higher wealth and 82.4% of them very happy.

Figure 1. C&RT graphic of selected variables with impact upon happiness*



^{*} For the variables M7 ('in marriage or union once or more') and WAGE ('age at first marriage/union') the missing values have been estimated (TIBCO Software Inc. 2017).

Discussion

The strength of this study is the fact that it is one of the very first which tries to make use of the available data and analyses how women in Montenegro think about their life. The optimistic view of the future, i.e. the expectation to be even happier next year, underlines that positive feelings dominate in the Montenegrin culture. The C&RT analysis shows for Montenegro that in all sub-groupings the category "Very happy" dominates with percentages between 55.5 and 82.4% in

any of the subgroups, bypassing e.g. the global spectrum between North America with 49% being very happy at the upper end and sub-Saharan Africa at the lower end with only 7% (4). Hart et al. (17) found positive relations between happiness and the areas of living as well as social relations, determinants which are not dominant in our study, partly because not sufficiently covered in the MICS dataset. This is a drawback of many studies in that the focus on individual-level strategies leaves out contextual factors.



The C&ART analysis we employed identifies only 3 predictors (or splitting variables) as most important, namely wealth, living in union, and age. Education, residence or the experience of violence and discrimination seem to have a lower impact on the dominant feeling of being happy or at least somewhat happy. This is supported by the equally prevalent indication of high satisfaction with life, reaching 82.0% at present, 76.6% expecting even higher levels next year. The high level of well-being in Montenegro may be plausible looking at available data at national level and compare Montenegro with the neighbouring countries: its national GDP reached with 21,470 USD PPP in 2019 the highest level whereas e.g. Serbia ranges lowest with 18,233 USD PPP (18). Likewise, female life expectancy in 1919 reaches in Montenegro 79.3 years vs. Serbia with 78.4 years and North Macedonia in between with 78.8 years. Last but not least, in Montenegro 49.9% of females share the labour force as compared to Serbia with 47.1 and North Macedonia with 44.9%. Taken together this seems to support the relatively high level of happiness and life satisfaction. Another variable, not included in the C&ART analysis because of the high number of missing values (45.3%), is the fact that 98.1% answer that they live together with their children in the same household, which indicates a healthy social family context. Upbringing and parenting may define to a large degree later happiness and satisfaction with life (19). This would support the Montenegrin policy to advance the societal status and role of women to strengthen social cohesion in the Montenegrin society.

However, we did not include in our analysis the perceived service quality of maternal care, available as antenatal care, delivery assistance and postnatal care as it would be relevant only for a smaller group of women. Yet, it would be interesting to relate our results to the mortality patterns in Montenegro as the impact of a reduced health status and of death on happiness has been looked at (20) but especially the reverse relationship lacks sufficient consideration. The British Million Women Study (21) analysed both options but did not find an impact of happiness on mortality.

The difficulties of research in this field are well analysed by Viswanath et al. (22) pointing especially to the lack of a well-acknowledged definition of happiness. Limitations of our study are in the first place the varying and for several variables very high number of missing information which led to their exclusion from the analysis. Secondly, answers may be more positive than is true because of traditional elements in the Montenegrin culture which lead women to hide weaknesses as others do not need to recognize them. On the other hand, the scales from 1-10 used in the survey are closed at both ends although personal experience may go far below or beyond. Likewise, it is not clear how reliable is the information about wealth, especially as women often do not oversee all incomes created by their husband and facilities/household equipment as used in the survey may not correspond to the actual wealth. Finally, to get the full picture a retrospective analysis as well as a comparative study in the region of South Eastern Europe should follow also including similar analyses of other family members i.e. fathers and children.

Conclusion

Montenegrin policies support the societal role of the family and of women in general. This analysis indicates a high degree of happiness and life satisfaction in Montenegro also of women at older age, not living in marital union, and at lower levels of wealth.



Montenegrin policies should continue to support the role of women in the society.

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ANNEXED DATA

Annex: Categorisation of all variables of potential relevance

Line	Variable Code	Long name	Level of Measure- ment	Missing values or Coding Problems	Suitable for Analy sis
10	WM6D	Day of interview	i	None	no
11	WM6M	Month of interview	cat.	None	yes
12	WM6Y	Year of interview	i	None	yes
29	WB3Y	Year of birth of woman	i	22.26% missing values	yes
30	WB4	Age of woman	i	22.26% missing values	yes
31	WB5	Ever attended school	cat.	22.26% missing values	no
32	WB6A	Highest level of school attended	cat.	23.4% missing values	yes
33	WB6B	Highest grade attended at that level	cat.	23.46% missing values	no
34	WB7	Ever completed that grade/year	cat.	23.4% missing values	no
35	WB9	Attended school during current school year	cat.	83% missing values	no
36	WB10A	Level of education attended current school year	cat.	89.2% missing values	no
37	WB10B	Grade attended at that level during current school year	i	89.2% missing values	no
38	WB11	Attended school previous school year	cat.	83% missing values	no
39	WB12A	Level of education attended previous school year	cat.	88% .25% missing values	no
40	WB12B	Grade attended at that level during previous school year	cat.	88% .25% missing values	no
41	WB14	Can read part of the sentence	cat.	97.78% missing values	no
42	WB15	Duration of living in current place	i	22.26% missing values	yes
43	WB16	Place of living prior to moving to current place	cat.	69.057% missing values	no
44	WB17	Region prior to moving to current place	cat.	69.057% missing values	no
45	CM1	Ever given birth	cat.	22.27% missing values	yes
46	CM2	Any sons or daughters living with you	cat.	45.28% missing values	yes
47	CM3	Sons living with you	i	46.31% missing values	no
49	CM5	Any sons or daughters not living with you	cat.	45.29% missing values	yes
50	CM12	Confirm total number of children ever born	cat.	22.26% missing values /1 code only "yes"	no



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58	CM15Y	Year of last birth	i	42.29% missing values	yes
60	CM16BY	Year of first birth	i	54.04% missing values	yes
75	CM32B	No wish to have a child/another child	cat.	97.13% missing values	no
77	CM32D	Preferring to have a boy, while a girl was expected	cat.	97.13% missing values	no
78	CM32E	Preferring to have a girl, while a boy was expected	cat.	97.13% missing values	no
81	СМ32Н	The parents were unmarried	cat.	97.13% missing values	no
93	MN4AU	Weeks or months pregnant at first prenatal care - unit	cat.	85.42% missing values	no
96	MN6A	Blood pressure	cat.	85.42% missing values	no
101-106	MN19A etc.	Assistance at delivery: Doctor etc.	cat.	97% and more missing values/ 1 code only	no
111	MN23	After the birth, baby was put directly on the bare skin of mother's chest	cat.	85.24% missing values	no
116	MN32	Size of child at birth	cat.	85.24% missing values	no
119	MN34	Weight at birth (Kilograms)	i	85.38% missing values	no
121	MN36	Ever breastfeed	cat.	85.24% missing values	no
140	PN5	Mother's health checked before leaving health facility	cat.	85.31% missing values	no
148-154	PN13N etc.	How long after delivery did the first check of baby happen - number etc.	i& cat.	86% to 100% missing values	no
181	UN12D	Reason: Hysterectomy	cat.	98.9% missing values	no
183	CP0I	Heard of: Diaphragm	cat.	98.9% missing values	no
191	CP3	Ever used a method to avoid pregnancy	cat.	34.4% missing values	yes
229	UN17	Availability of private place for washing during last menstrual period	cat.	26.33% missing values	yes
234	DV1C	If she argues with husband: wife beating justified	cat.	22.26% missing values	yes
235	DV1D	If she refuses sex with husband: wife beating justified	cat.	22.26% missing values	yes
236	DV1E	If she burns the food: wife beating justified	cat.	22.27% missing values	yes
239	VT3	Number of times victimisation happened in the last year	cat.	99.96% missing values	no
251	VT13	Number of people involved in committing the offence	cat.	99.6% missing values	no
259	VT20	Feeling safe walking alone in neighbourhood after dark	cat.	22.27% missing values	yes



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260	VT21	Feeling safe at home alone after dark	cat.	22.27% missing values	yes
268	MA1	Currently married or living with a man	cat.	22.27% missing values	yes
270	MA5	Ever married or lived with a man	cat.	77.13% missing values	no
271	MA6	Marital status	cat.	96.6% missing values	no
272	MA7	Married or lived with a man once or more than once	cat.	42.7% missing values	yes
284	SB1	Age at first sexual intercourse	i& cat.	22.7% missing values/ mixed coding	no
290	SB7	Sex with any other person in the last 12 months	cat.	36.68% missing values	yes
294	HA1	Ever heard of HIV or AIDS	cat.	22.27% missing values	yes
325	HA31	Children living with HIV should be allowed to attend school with other children	cat.	26.47% missing values	yes
331	IA1	Do any vaccines cause serious adverse reactions after vaccination	cat.	22.27% missing values	yes
345	LS1	Estimation of overall happiness	i	22.27% missing val- ues/ no response extra category	yes
-	LS1_cat	Estimation of overall happiness (categories)	cat.	22.27% missing values	yes
346	LS2	Satisfaction with ladder step	i& cat.	22.27% missing values / no response as category	yes
347	LS3	Life satisfaction in comparison with last year	cat.	22.yesyes27% missing values / no response as category	Yes
348	LS4	Life satisfaction expectation one year from now	cat.	22.27% missing val- ues / no response as category	yes
353	WAGEM	Age at first marriage/union of woman	i	42.69% missing values	yes
361	welevel	Education	cat.	22.7% missing values	yes
364	migration	Length of stay in current place of residence	cat.	22.27% missing values	yes
369	HH7	Region	cat.	none	yes
373	windex5	Wealth index quintile	i& cat.	mixture of category and numbers	yes