

# WORLD HEALTH SURVEY -United Arab Emirates- HIGHLIGHTS

## ***Research Background***

The World Health Survey (WHS) series was developed by the World Health Organization (WHO) as a means to compile comprehensive baseline information on the health of populations. The outcome of the WHS is usually associated with the investment in health systems and provides baseline evidence on the way health systems are currently functioning, and extends the ability to monitor inputs, functions and results

Due to the standardized survey protocols and questionnaires, the information obtained is also comparable between countries, facilitating interesting Multi-Country and Regional analysis; the WHS has already been conducted in more than 75 countries.

The World Health Survey was implemented in UAE and other Gulf Cooperation Council (GCC) countries through consultation with health authorities and policy-makers in different countries and in collaboration with the people involved in routine health information systems. Training and other preparations for the WHS are complementary to health information systems team efforts to ensure data input in a cost-effective way and that important gaps in health information are covered.

## ***Research Background***

The survey in UAE was entrusted to a team of experts from the Ministry of Health, drawn from the fields of public health, epidemiology and statistics. The implementation was assisted by a technical team from WHO. There were two main stakeholders in the UAE WHS programme: The Ministry of Health and the National Bureau of Statistics.

The survey was designed on a modular base , with the intention to provide low-cost information that supplements data from National Health Information System in order to build-up an evidence base for policy makers.

The motivation for conducting the WHS in UAE is to obtain good quality data and evidence that will form the basis of health reform in the country. The health system has undergone large reforms since 2000. The results from this WHS are therefore useful in two respects: as an indicator of the health of the UAE population and as a baseline against which the changes to the health system can be assessed

All procedures used in the preparation and implementation of the survey complied with the WHO standard procedures.

## *Survey Objectives*

- Develop a mean of obtaining valid, reliable and comparable health information to supplement that provided by routine health information systems from MOH and other organizations
- Build the evidence which is necessary for policy makers to monitor and evaluate if current health system is achieving its desired goals, and to assess what additional investments and resources in health systems would be required to meet national targets.
- Provide policy-makers with the evidence they need to adjust their policies, strategies and programmes as necessary

## *Sample Design*

### Household Survey

The WHS sampling guidelines recommend a target sample size of (n=5000) households wherein one member per household is selected at random to respond to the “household” questionnaire. As a result, the target sample size for individuals is also (n=5000). Numeration Areas stratified by Emirate and Type of District (urban vs rural) were used as clusters in the sampling frame. Initially the PSUs were sorted by the different sampling characteristics including geography in order to improve the representativity of the sample in the first stage.

The WHS sample was Multi-Stage Stratified Random sample. Probability Proportional to Size (PPS) technique was used in the first stage to select at random a total of (174) representative clusters, with constant fraction of (30) houses per cluster.

The target sample size of (n= 5000) was divided approximately equally between UAE and non-UAE households. As there are fewer UAE households the result of this equal division means that a higher proportion of UAE households were covered in the survey. The reason being to achieve greater precision for the estimates produced from the survey for the UAE population at the disaggregate levels.

## ***Sample Design (Continuation ....)***

### **Household Survey**

The sample database supplied by the different domestic statistical centers were sorted by street and clusters so that visiting the sample households would be optimized in the field and logistics would be kept at their minimal extent.

### **Collective Households:**

During the field survey implementation, upon encountering any household that presented characteristics of a collective household a verification process was applied and consequently the collective household questionnaire was used with individual members selected at random amongst the Collective residents.

### **Labour Camps:**

A sample frame of reference was initially established upon enumeration of a large number of residential labour camps around the different cities in the UAE

The camps were classified into 3 size categories and the sample was distributed in accordance

## Sample Design (Continuation ....)

	Sample size		Respondents				
	Planned	Achieved	Household Representative	Individual Adult	Ever Married Women	Elderly Member	Labour Camps Members
Local Standard households	2584	1787	1787	1208	1753	226	-
Non-Local Standard households	2154	1635	1635	1371	750	56	-
Non-Local Collective	464	459	-	459	-	-	-
Non-Local Labour Camps	-	-	-	1000	-	-	1000
<b>Total sample</b>	<b>5202</b>	<b>3881</b>	<b>3422</b>	<b>4038</b>	<b>2503</b>	<b>282</b>	<b>1000</b>

**Response Rate = 75%    Non-Response Rate = 25%**

## *Survey Methodology*

### 1. Target Groups:

The survey has addressed two distinct target groups:

- ❑ The Household Survey: Wherein adult members were interviewed to represent the adult population 18 years and over living in regular households

The household as a whole, represented by one household adult member, male or female selected at random, to cover subjects related to the whole household and the members living together and forming the household. These households represent standard households inhabited by nationals and non-nationals.

- ❑ Two major variants being the collective Household and Labour Camps:
  - The individual adult member of a “Collective Household”
  - The individual adult member resident of a “Labour Camp”



## *Survey Methodology*

### **2. Survey Instruments:**

The Household survey has used questionnaires specially designed for different profiles of members from standard households which include:

- The Individual Adult, aged 18 years and over, selected at random amongst all members
- The Elderly, members of the household, male or female aged 60 years and over, to cover subjects related to senior members of the population
- The Ever Married Women, members of the household, selected at random amongst ever married females to cover subjects related to reproductive health

The surveys conducted with collective households and labour camps residents have used only modified versions of the Individual member questionnaire wherein topics were slightly adapted to their particular environment

All Interviews were conducted face-to-face with individuals selected through the relevant Multi-Stage random probability sampling

## *Questionnaire Design*

The UAE World Health Survey uses a common survey instrument, developed by WHO, with separate modules for various components. The modules cover key aspects of health system outcomes, inputs to that system and aspects of the way systems function. The different modules cover:

- **The health states of the population:** measuring health in multiple domains
- **Risk factors and their association with health states:** measuring various risk factors such as tobacco, nutrition and physical activity levels
- **The Non-Communicable Diseases (NCDs):** measuring the associated risk factors of the Non-communicable diseases (NCDs)
- **The responsiveness of health systems:** whether a health system meets the legitimate expectations of the population
- **Coverage, access and use of key health services** such as immunization, treatment of childhood illness, safe motherhood interventions, essential treatments, mental health interventions, etc.

## ***Reports***

The results of the research program are presented in several reports:

1. The Standard Household Survey Report, concerned with the particular characteristics of households
2. The Individual Adult Survey Report, concerned with the topics covered in the survey of adults male and female aged 18 years and over.
3. The Elderly members reporting on a sub sample of the elderly individuals (extracted from 2 above) in addition to a Boost sample of elderly directly targeted if available in the household
4. The Collective Household residents reporting on the “Individuals Health Indicators”
5. The Labour Camps residents reporting on the individual member’s health indicators

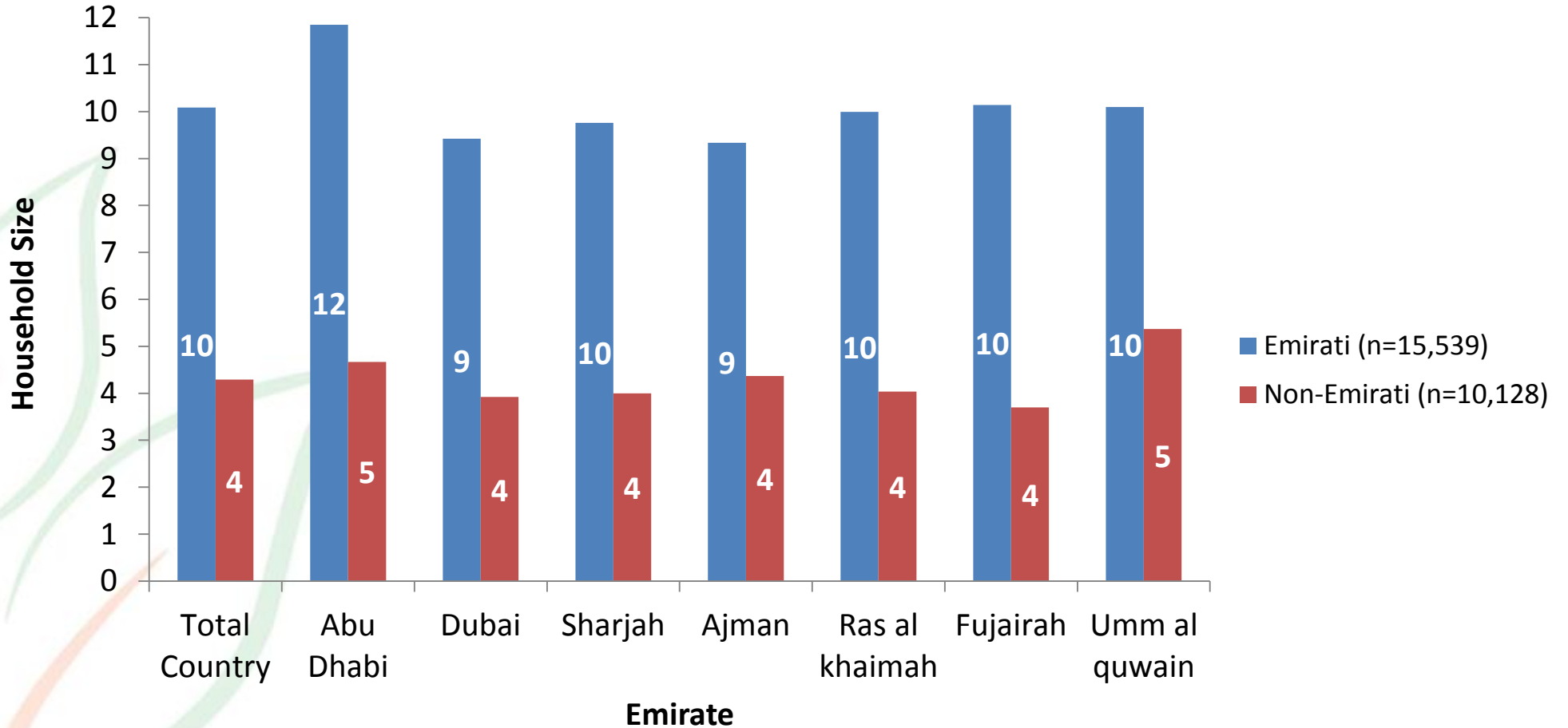


## HOUSEHOLD STATISTICS

# World Health Survey-UAE



**Figure 1: Average household size by emirate for Emirati and Non-Emirati households**



*The figures in parenthesis indicate the base of the respective category*

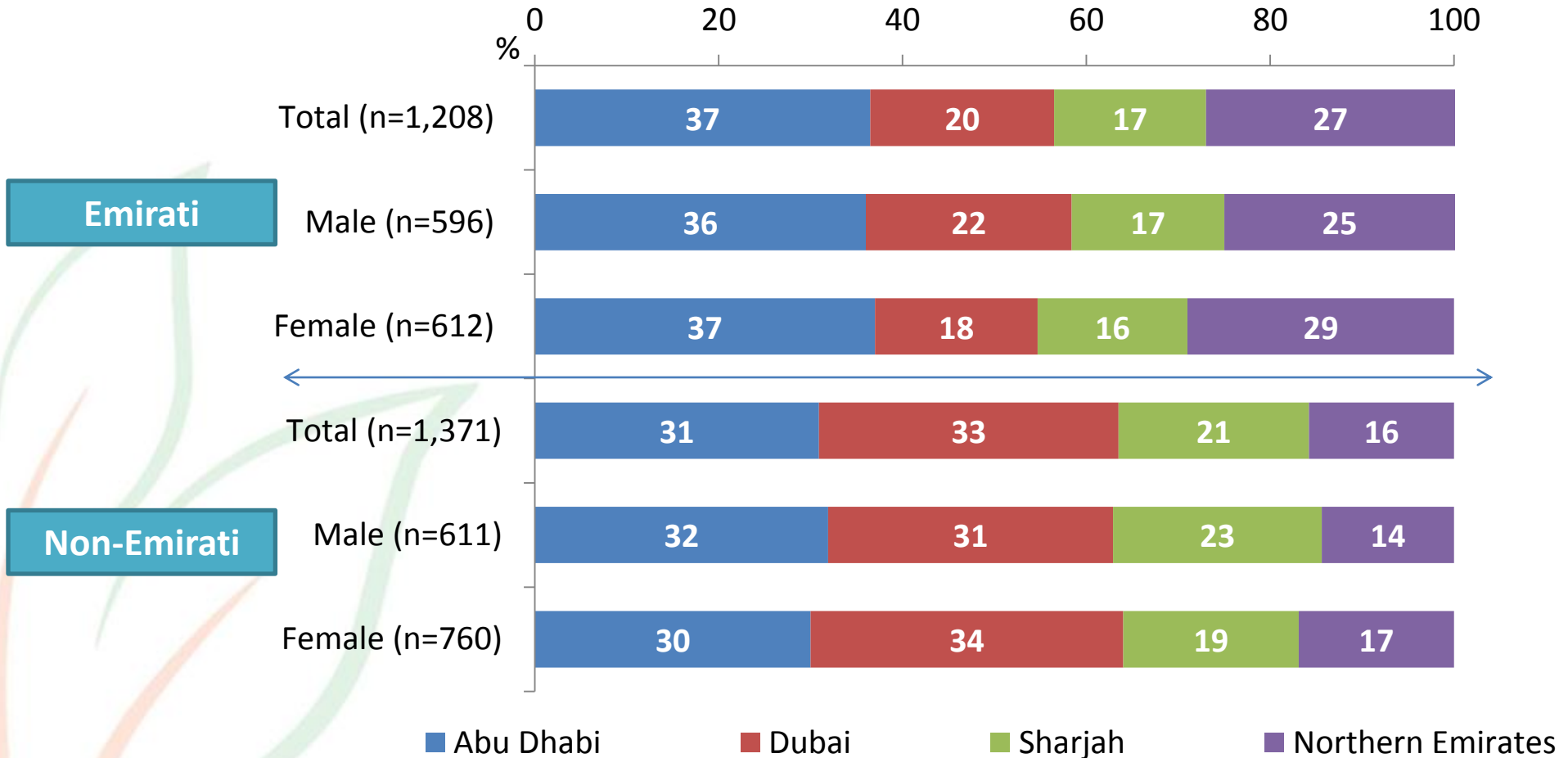


## INDIVIDUAL STATISTICS

# World Health Survey-UAE



**Figure 2a:** Sample Profile of Emirati & Non-Emirati respondents by Emirate

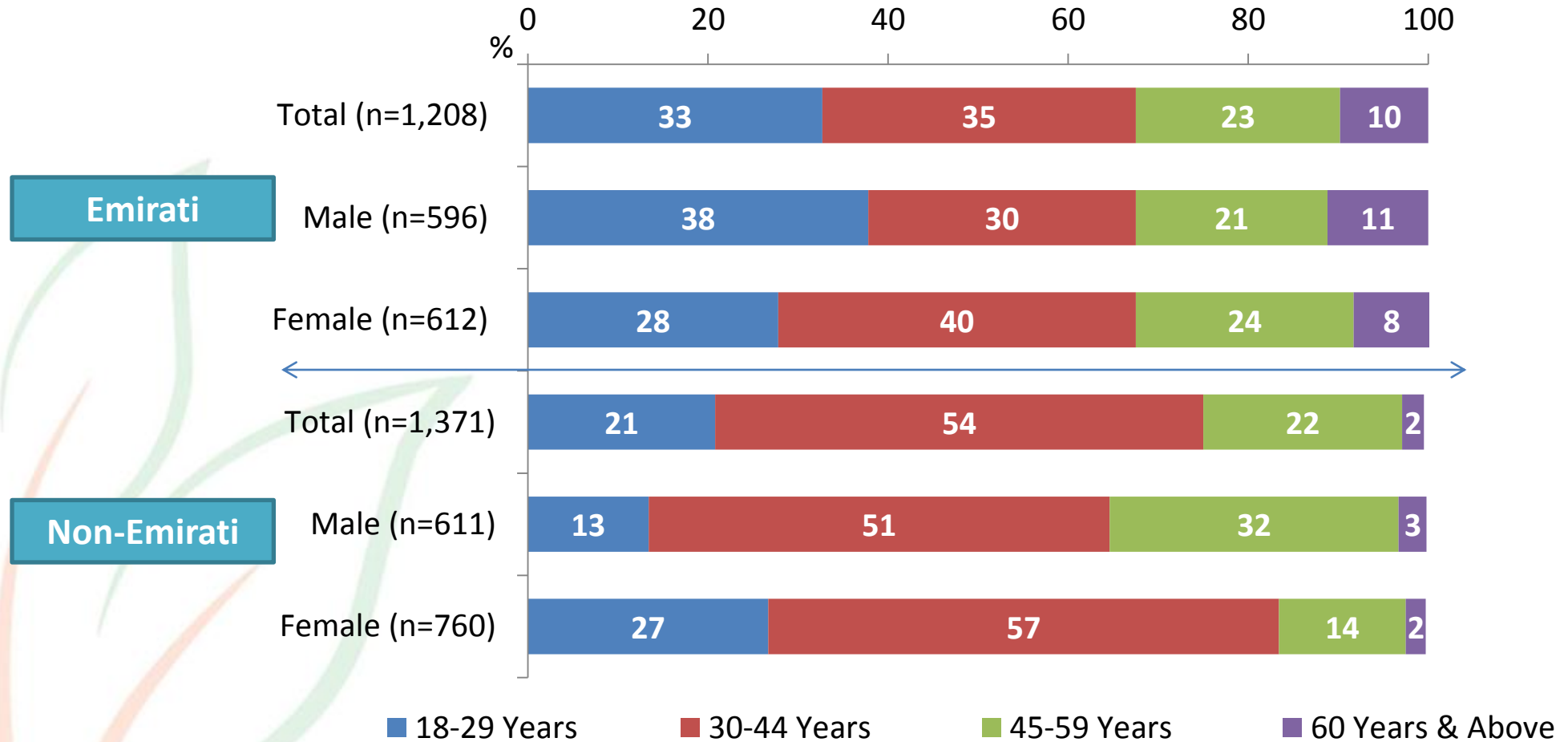


*The figures in parenthesis indicate the base of the respective category*

# World Health Survey-UAE



**Figure 2b:** Sample Profile of Emirati & Non-Emirati respondents by Age Groups

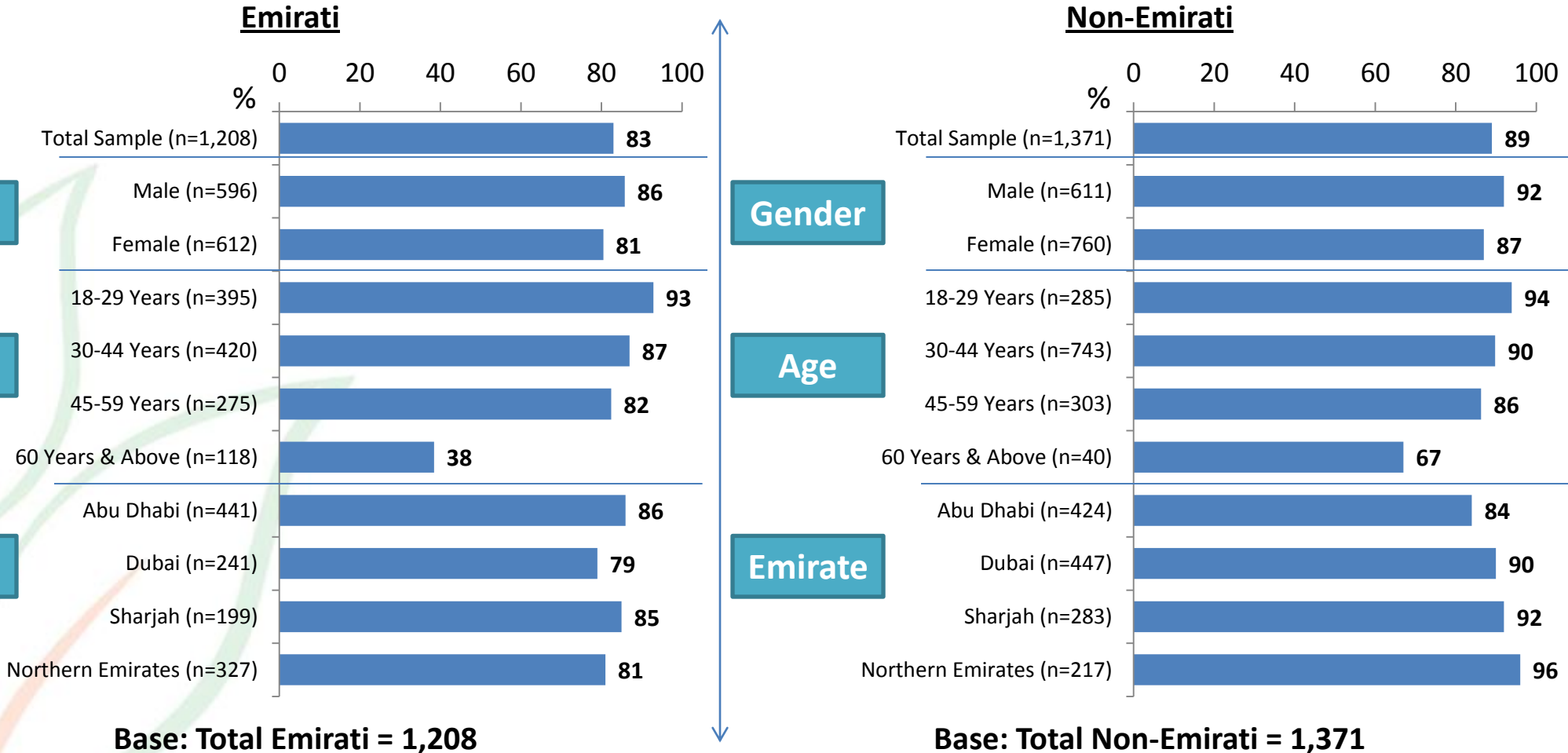


*The figures in parenthesis indicate the base of the respective category*



# World Health Survey-UAE

**Figure 3: Overall health rating for Emiratis and Non-Emiratis by Gender, Age Group and Emirate**



*The figures in parenthesis indicate the base of the respective category*

**Note:** Chart indicates the sum of 'Very Good' and 'Good' self-ratings of own health overall.

**Table 1a:** Prevalence of smoking amongst Emirati Males & Females

	Emirati					
	Male			Female		
	Total Sample	h% Ever Smokers	h% Daily Smokers	Total Sample	h% Ever Smokers	h% Daily Smokers
<b><u>Total</u></b>	<b>596</b>	34.6	25.4	<b>612</b>	1.7	0.8
<b><u>Age</u></b>						
18-29 Years	<b>225</b>	26.6	20.8	<b>170</b>	0.6	0.2
30-44 Years	<b>177</b>	37.2	28.4	<b>243</b>	2.5	0.7
45-59 Years	<b>127</b>	39.4	27.8	<b>148</b>	2.1	1.7
60 Years & Above	<b>67</b>	45.3	27.8	<b>51</b>	1.1	1.1

**Note:** % Ever Smokers includes: Smokers “Daily”, “In-Frequent” and “Lapsed” smokers.

**h%:** % to be read Horizontally

**Table 1b:** Prevalence of smoking amongst Non-Emirati Males & Females

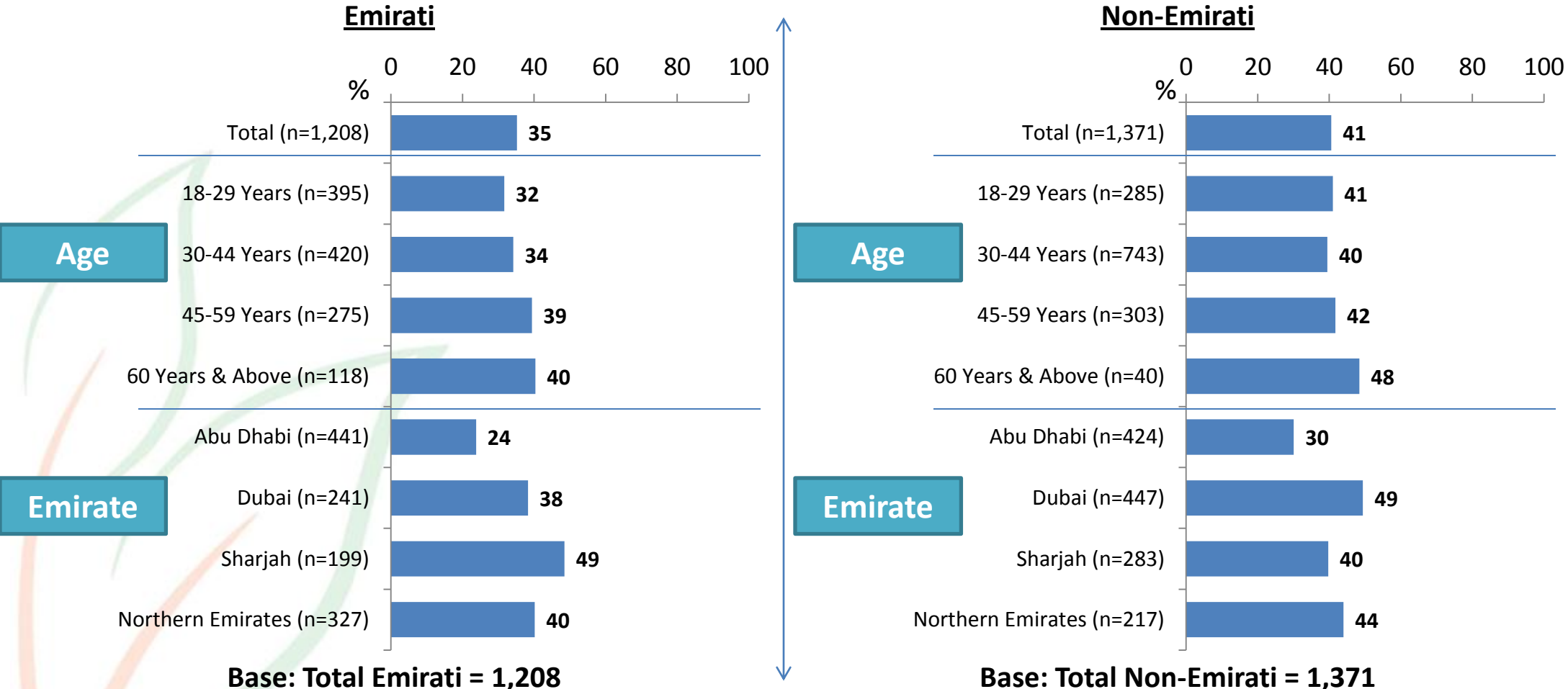
	Non-Emirati					
	Male			Female		
	Total Sample	h% Ever Smokers	h% Daily Smokers	Total Sample	h% Ever Smokers	h% Daily Smokers
<b><u>Total</u></b>	<b>611</b>	27.9	17.8	<b>760</b>	2.0	2.8
<b><u>Age</u></b>						
18-29 Years	<b>82</b>	24.1	15.8	<b>203</b>	1.9	0.4
30-44 Years	<b>313</b>	28.6	18.0	<b>431</b>	6.2	3.7
45-59 Years	<b>196</b>	28.4	18.6	<b>107</b>	2.4	0.5
60 Years & Above	<b>20</b>	25.7	14.6	<b>19</b>	27.6	22.1

**Note:** % Ever Smokers includes: Smokers “Daily”, “In-Frequent” and “Lapsed” smokers.

**h%:** % to be read Horizontally

# World Health Survey-UAE

**Figure 4: Consumption of Sufficient fruit and vegetables, Emirati and Non-Emirati**



*The figures in parenthesis indicate the base of the respective category*

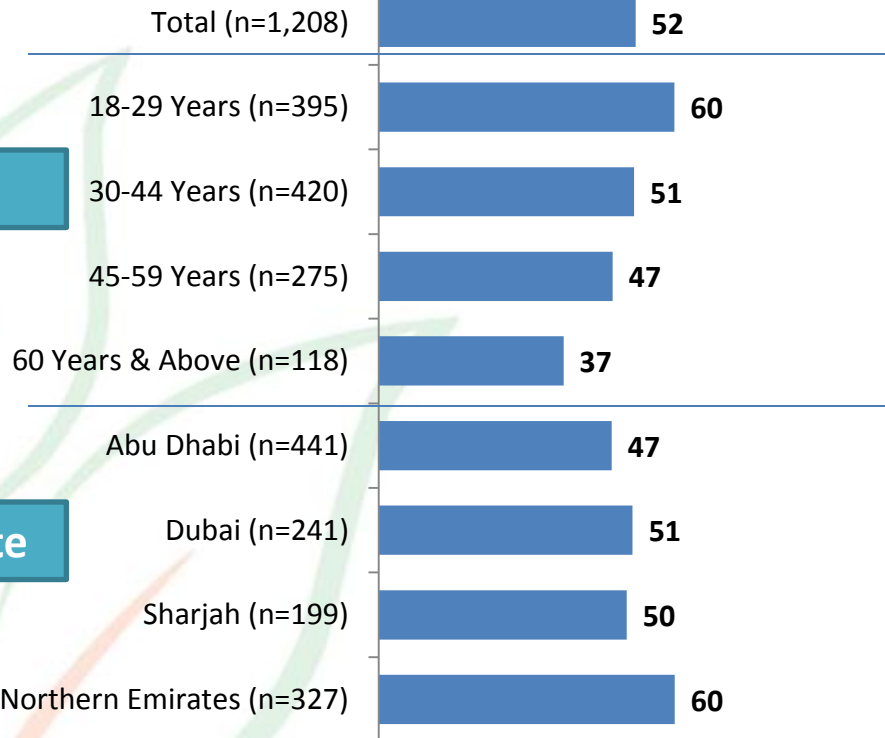
**Note:** Sufficient classified as more than 5 portions of fruits and vegetables a day

# World Health Survey-UAE

**Figure 5: Sufficient Physical Activities Practiced, Emirati and Non-Emirati**

## Emirati

0 20 40 60 80 100  
%



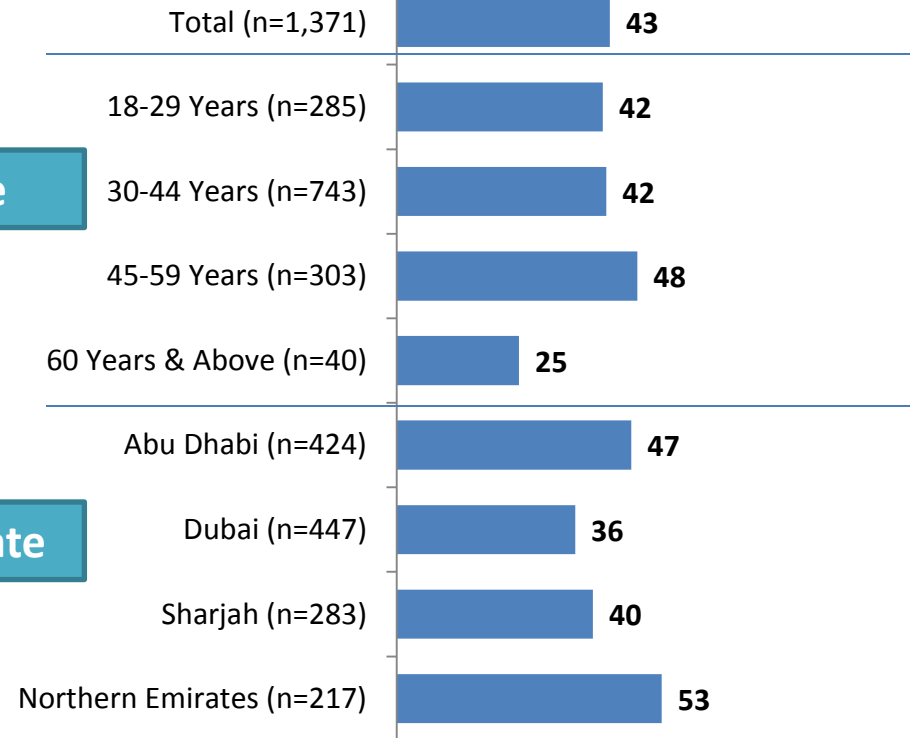
Age

Emirate

Base: Total Emirati = 1,208

## Non-Emirati

0 20 40 60 80 100  
%



Age

Emirate

Base: Total Non-Emirati = 1,371

*The figures in parenthesis indicate the base of the respective category*

**Note:** Sufficient classified as more than 150 minutes physical activities in a typical week

# World Health Survey-UAE

**Table 2.1:** Self-reported non-communicable conditions: Emirati and Non-Emirati

	Emirati				Non-Emirati			
	Total Sample	Angina	Asthma	Diabetes	Total Sample	Angina	Asthma	Diabetes
		Need	Need	Need		Need	Need	Need
		h%	h%	h%		h%	h%	h%
<b>Total</b>	<b>1,208</b>	1.8	5.2	12.6	<b>1,371</b>	0.4	4.6	5.3
<b>Gender</b>								
Male	596	1.3	3.5	11.0	611	0.3	3.4	6.8
Female	612	2.3	6.9	14.2	760	0.4	3.5	4.1
<b>Age</b>								
18-29 Years	395	0.6	2.7	1.8	285	0.2	8.1	0.8
30-44 Years	420	1.4	6.2	8.3	744	0.5	3.7	3.8
45-59 Years	275	0.8	4.4	23.5	303	0.2	3.5	9.6
60 Years & Above	118	9.6	12	38.8	40	1.2	3.2	33.3
<b>Emirate</b>								
Abu Dhabi	441	0.7	3.2	9.1	423	0.1	5.3	6.3
Dubai	241	4.7	5.9	13.5	447	0.3	4.8	6.2
Sharjah	199	0.6	5.9	11.0	283	1.2	2.8	2.9
Northern Emirates	327	1.9	7.1	17.8	217	0.0	5.0	4.8

**Self Reported Non-Communicable Conditions Indicators:**

"Need" = % of total respondents indicating having received a diagnosis of the condition (angina, Asthma and diabetes) in last 12 months.

h%: % to be read Horizontally

# World Health Survey-UAE



**Table 2.2:** Self-reported non-communicable conditions: Emirati and Non-Emirati

	Emirati				Non-Emirati			
	Total Sample	Stroke	Chronic Lung Disease	Hypertension	Total Sample	Stroke	Chronic Lung Disease	Hypertension
		Need	Need	Need		Need	Need	Need
		h%	h%	h%		h%	h%	h%
<b>Total</b>	<b>1,208</b>	0.7	3.3	1.4	<b>1,371</b>	0.4	1.3	7.8
<b>Gender</b>								
Male	<b>596</b>	0.6	3.5	11.8	<b>611</b>	0.8	1.0	8.5
Female	<b>612</b>	0.7	3.0	12.9	<b>760</b>	0.0	1.6	7.3
<b>Age</b>								
18-29 Years	<b>395</b>	0.7	2.4	1.4	<b>285</b>	0.0	1.3	2.3
30-44 Years	<b>420</b>	0.3	3.1	10.0	<b>744</b>	0.3	0.6	4.7
45-59 Years	<b>275</b>	1.1	1.7	19.9	<b>303</b>	0.4	2.6	16.3
60 Years & Above	<b>118</b>	0.7	10.3	39.8	<b>40</b>	4.1	5.6	42.3
<b>Emirate</b>								
Abu Dhabi	<b>441</b>	0.1	1.6	8.3	<b>423</b>	0.6	1.7	10.3
Dubai	<b>241</b>	1.5	5.7	11.7	<b>447</b>	0.4	1.4	7.0
Sharjah	<b>199</b>	0.4	3.9	17.9	<b>283</b>	0.3	1.0	5.4
Northern Emirates	<b>327</b>	1.0	3.4	15.0	<b>217</b>	0.0	0.9	8.0

**Self Reported Non-Communicable Conditions Indicators:**

"Need" = % of total respondents indicating having received a diagnosis of the condition (stroke, chronic lung disease, hypertension) in last 12 months.

h%: % to be read horizontally

# World Health Survey-UAE



**Table 3:** Percentage of overweight and obese respondents (measured) by Gender, Age Groups and Region split by Emirati and Non-Emirati

	Emirati				Non-Emirati			
	Total Sample	Excess Weight	Overweight	Obesity	Total Sample	Excess Weight	Overweight	Obesity
		h%	h%	h%		h%	h%	h%
<b>Total</b>	<b>1,208</b>	71.4	34.2	37.2	<b>1,371</b>	67.9	41.6	26.3
<b>Gender</b>								
Male	<b>596</b>	74.2	43.1	31.1	<b>611</b>	70.4	46.5	23.9
Female	<b>612</b>	68.2	23.9	44.3	<b>760</b>	66.0	37.9	28.1
<b>Age</b>								
18-29 Years	<b>395</b>	52.5	29.6	22.9	<b>285</b>	51.0	33.3	17.7
30-44 Years	<b>420</b>	77.3	37.5	39.8	<b>744</b>	68.2	43.5	24.7
45-59 Years	<b>275</b>	85.6	33.6	52.0	<b>303</b>	80.5	45.2	35.3
60 Years & Above	<b>118</b>	75.2	40.8	34.4	<b>40</b>	89.5	40.2	49.3
<b>Emirate</b>								
Abu Dhabi	<b>441</b>	64.5	32.5	32.0	<b>423</b>	78.7	43.7	35.0
Dubai	<b>241</b>	87.6	52.6	35.0	<b>447</b>	61.8	42.1	19.7
Sharjah	<b>199</b>	75.7	28.6	47.1	<b>283</b>	63.0	35.4	27.6
Northern Emirates	<b>327</b>	70.8	27.2	43.6	<b>217</b>	65.3	42.4	22.9

**Remarks:** Excess weight is the summation of overweight and obesity

Overweight ( $25 \leq \text{BMI} < 30$ )

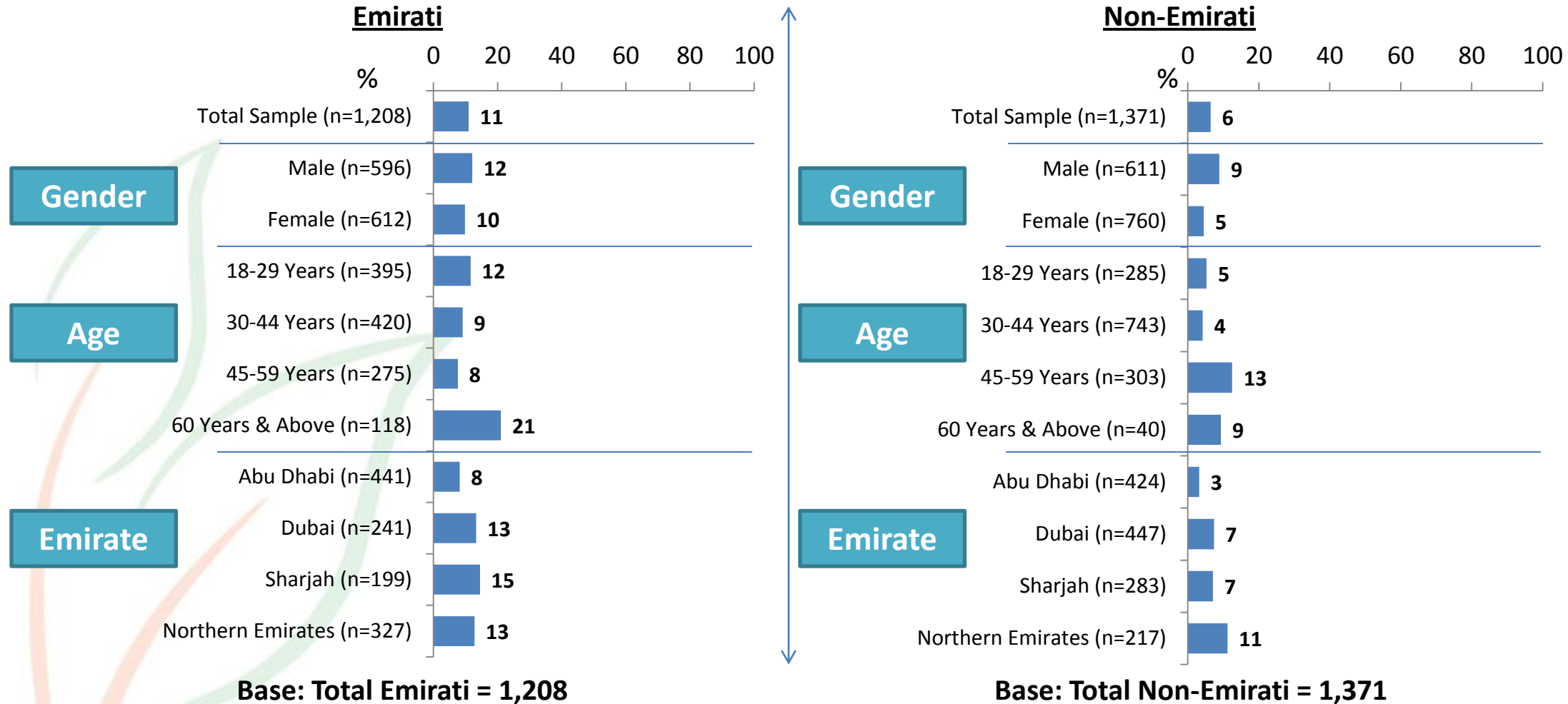
Obesity ( $\text{BMI} \geq 30$ )

**h%:** % to be read horizontally



# World Health Survey-UAE

**Figure 6:** Percentage of Hemoglobin (Hgb), Blood Glucose (BG) and Anemia levels by Gender, Age Group and Region: Emirati and Non-Emirati



*The figures in parenthesis indicate the base of the respective category*

**Table 4:** Percentage with high total cholesterol by Gender, Age Groups and BMI status: Emirati and Non-Emirati

	Emirati		Non-Emirati	
	Total Sample	h% with high cholesterol	Total Sample	h% with high cholesterol
<b>Total</b>	<b>1,208</b>	11.8	<b>1,371</b>	6.0
<b>Gender</b>				
Male	<b>596</b>	13.9	<b>611</b>	5.9
Female	<b>612</b>	9.6	<b>760</b>	6.0
<b>Age</b>				
18-29 Years	<b>395</b>	4.6	<b>285</b>	4.2
30-44 Years	<b>420</b>	14.7	<b>744</b>	6.2
45-59 Years	<b>275</b>	17.3	<b>303</b>	5.9
60-69 Years	<b>118</b>	13	<b>40</b>	9
<b>BMI</b>				
< 18.5	<b>441</b>	0.0	<b>423</b>	0.0
18.5- 24.9	<b>241</b>	9.2	<b>447</b>	2.5
25 - 29.9	<b>199</b>	12.7	<b>283</b>	4.1
30+	<b>327</b>	16.0	<b>217</b>	8.0

**Note:** h% to be read horizontally

# World Health Survey-UAE



**Table 5:** Road accidents and injuries by Gender, Age and Region split by Emirati and Non-Emirati

	Emirati			Non-Emirati		
	Total Sample	Road Traffic Accidents	Injury	Total Sample	Road Traffic Accidents	Injury
		Need	Need		Need	Need
		h%	h%		h%	h%
<b>Total</b>	<b>1,208</b>	1.7	2.7	<b>1,371</b>	1.5	0.6
<b>Gender</b>						
Male	<b>596</b>	2.8	2.7	<b>611</b>	1.3	0.9
Female	<b>612</b>	0.6	2.7	<b>760</b>	1.7	0.4
<b>Age</b>						
18-29 Years	<b>395</b>	2.4	4.7	<b>285</b>	2.6	0.0
30-44 Years	<b>420</b>	2.6	2.2	<b>744</b>	1.1	0.9
45-59 Years	<b>275</b>	0.1	0.9	<b>303</b>	1.7	0.7
60 Years & Above	<b>118</b>	0.0	2.4	<b>40</b>	0.0	0.0
<b>Emirate</b>						
Abu Dhabi	<b>441</b>	1.7	3.2	<b>423</b>	1.6	0.5
Dubai	<b>241</b>	1.1	3.2	<b>447</b>	2.2	0.7
Sharjah	<b>199</b>	1.6	2.1	<b>283</b>	1.1	0.6
Northern Emirates	<b>327</b>	2.2	2.2	<b>217</b>	0.5	0.7

**Self Reported Non-Communicable Conditions Indicators:**

"Need" = % of all respondents indicating having suffered bodily injury from a road traffic accident in last 12 months.

h%: % to be read horizontally



## COLLECTIVE HOUSEHOLDS STATISTICS

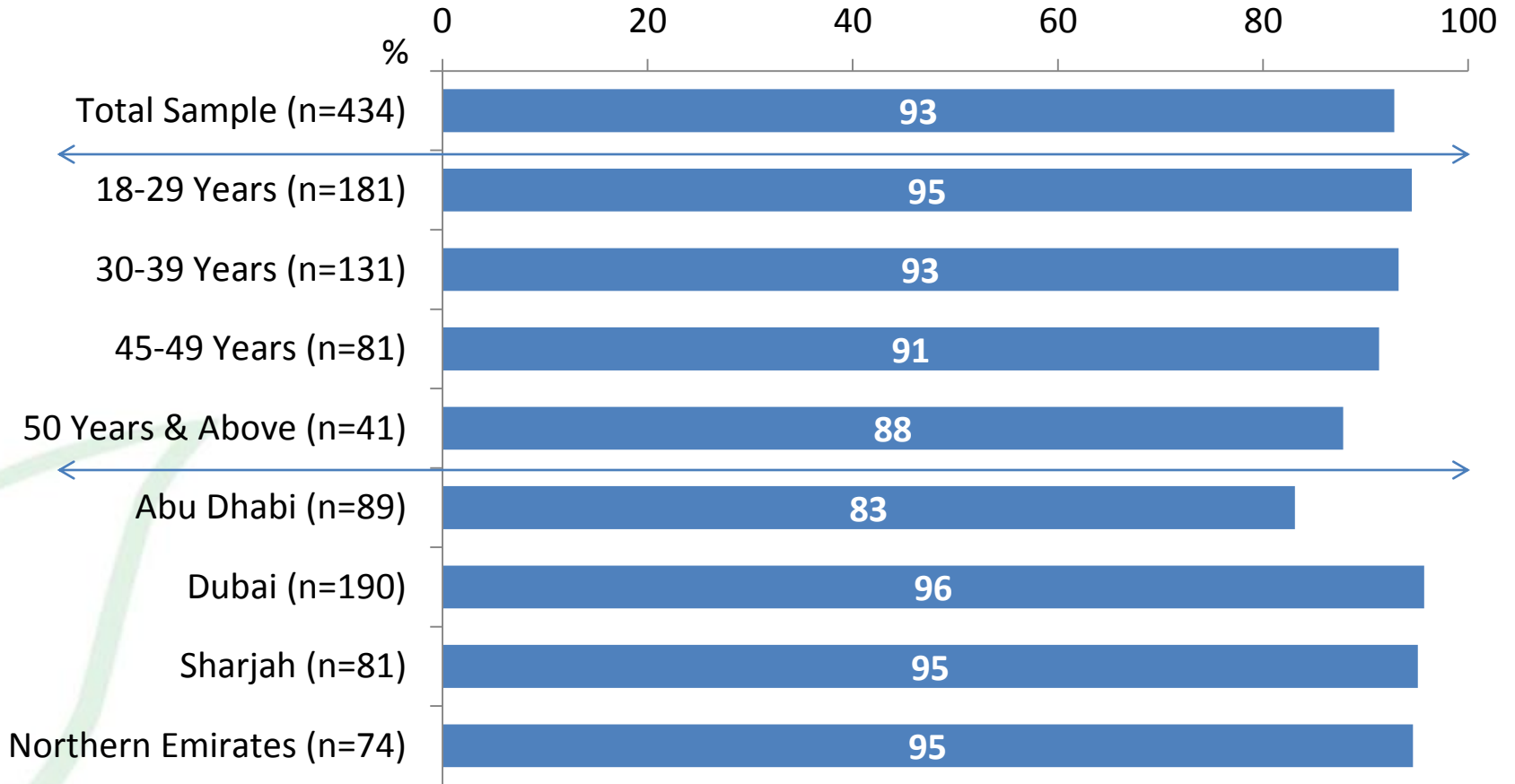
**Table 6:** Sample Profile of Respondents from collective households by Age Group and Emirate

	Total Sample	%
<b><u>Total</u></b>	<b>434</b>	<b>100.0</b>
<b><u>Age</u></b>		
18-29 Years	<b>181</b>	<b>41.7</b>
30-39 Years	<b>131</b>	<b>30.2</b>
40-49 Years	<b>81</b>	<b>18.7</b>
50 Years & Above	<b>41</b>	<b>9.4</b>
<b><u>Emirate</u></b>		
Abu Dhabi	<b>89</b>	<b>20.5</b>
Dubai	<b>190</b>	<b>43.8</b>
Sharjah	<b>81</b>	<b>18.7</b>
Northern Emirates	<b>74</b>	<b>17.1</b>

# World Health Survey-UAE



**Figure 7: Overall health rating by Age Group and Emirate**



**Base: Total Sample of Collective Households = 434**

*The figures in parenthesis indicate the base of the respective category*

**Note:** Chart indicates the sum of 'Very Good' and 'Good' self-ratings of own health overall of respondents from collective households.

**Table 7:** Consumption of sufficient fruits and vegetables by Age Group and Emirate

	Total Sample	Sufficient		
		Intake of Fruits	Intake of Vegetables	Physical Activities
		h%	h%	h%
<b>Total</b>	<b>434</b>	1.2	5.3	31.3
<b>Age</b>				
18 to 29 Years	<b>181</b>	1.1	2.8	26.0
30 to 39 Years	<b>131</b>	1.5	9.2	32.8
40 to 49 Years	<b>81</b>	-	3.7	40.7
50 Years & Above	<b>41</b>	2.4	7.3	31.7
<b>Emirate</b>				
Abu Dhabi	<b>89</b>	-	-	52.8
Dubai	<b>190</b>	0.5	5.8	29.5
Sharjah	<b>81</b>	3.7	9.9	22.2
Northern Emirates	<b>74</b>	1.4	5.4	20.3

**Note:** Sufficient classified as more than 5 portions of fruits and vegetables a day

Sufficient Physical Activities classified as more than 150 minutes physical activities in a typical week

**h%:** % to be read horizontally



## ELDERLY CITIZENS 60 YEARS & OVER STATISTICS

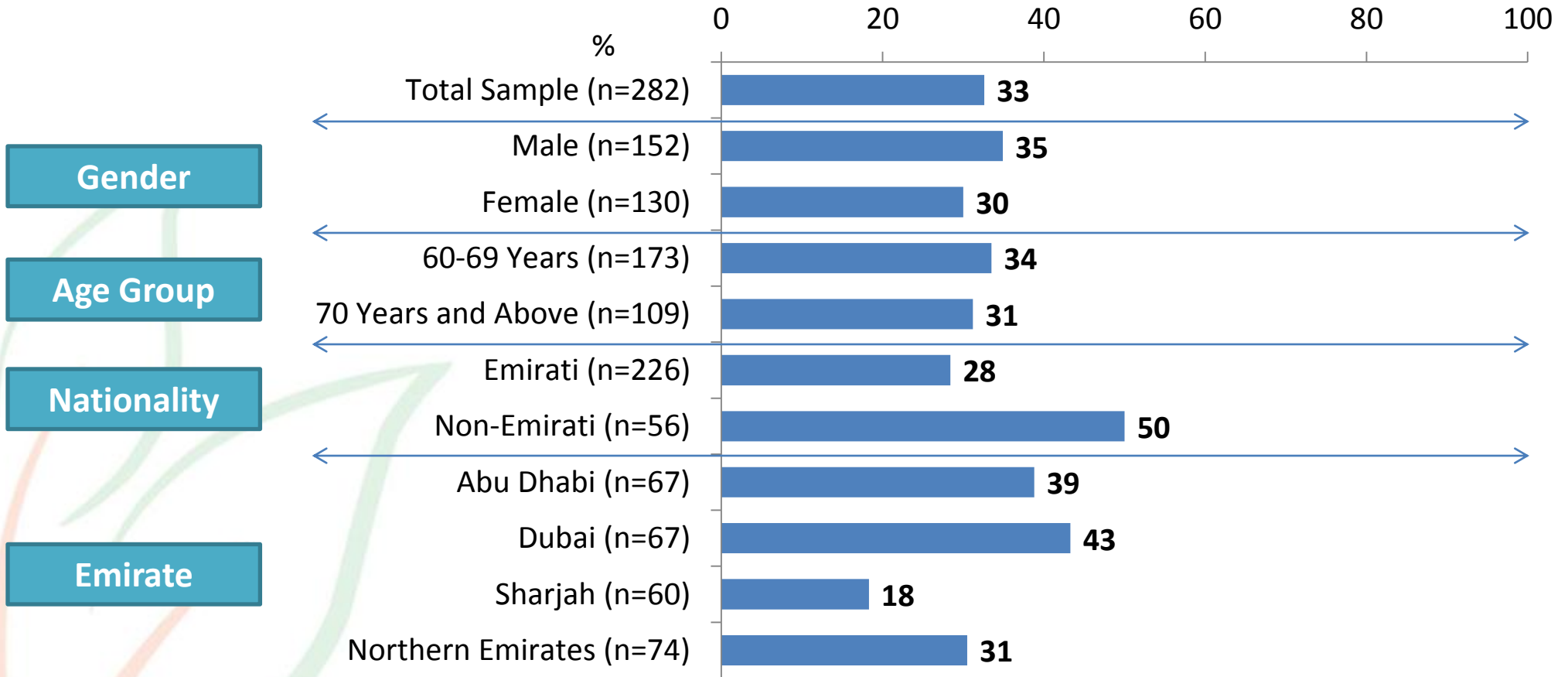


**Table 9:** Sample profile of elderly respondents to the individual questionnaire

	Total Sample	Male	Female
		v%	v%
<b>Nationality</b>			
Emirati	226	79.6	80.8
Non-Emirati	56	20.4	19.2
<b>Age</b>			
60 to 69 Years	173	63.8	58.5
70 Years & Above	109	36.2	41.5
<b>Emirate</b>			
Abu Dhabi	67	25.0	22.3
Dubai	67	19.1	29.2
Sharjah	60	23.0	19.2
Northern Emirates	88	32.9	29.3
<b>Total Sample</b>	<b>282</b>	<b>152</b>	<b>130</b>

v%: % to be read Vertically

**Figure 8:** Overall health rating (very good or good) by Gender, Age Group, Nationality and Emirate



**Base: Total Sample of Elderly Citizens Aged 60 Years and Over = 282**

*The figures in parenthesis indicate the base of the respective category*

**Note:** Chart indicates the sum of 'Very Good' and 'Good' self-ratings of own health overall.

# World Health Survey-UAE



**Table 10:** Percentage distribution of satisfaction with different aspects of life by Gender, Nationality, Age Group & Emirate

	Total Sample	Satisfaction With:		
		Overall Health h%	Ability to perform daily living activities h%	Conditions of living place h%
<b>Total</b>	<b>282</b>	70.6	59.6	79.8
<b>Gender</b>				
Male	152	73.7	64.5	79.6
Female	130	66.9	53.8	80.0
<b>Age</b>				
60 to 69 Years	173	70.5	65.9	81.5
70 Years & Above	109	70.6	49.5	77.1
<b>Nationality</b>				
Emirati	226	68.6	56.6	79.2
Non-Emirati	56	78.6	71.4	82.1
<b>Emirate</b>				
Abu Dhabi	67	79.1	62.7	85.1
Dubai	67	73.1	59.7	79.1
Sharjah	60	66.7	56.7	86.7
Northern Emirates	74	65.5	61.4	71.9

**h%:** % to be read horizontally



## Ever Married Women STATISTICS

# World Health Survey-UAE



**Table 11:** Percentage of mothers receiving sufficient care

	Total Sample	Sufficient care
		h%
<b>Nationality</b>		
Emirati	700	58.6
Non-Emirati	545	52.5
<b>Emirate</b>		
Abu Dhabi	485	54.2
Dubai	256	50.4
Sharjah	246	58.5
Northern Emirates	257	61.9
<b>Total Sample</b>	<b>1,245</b>	<b>55.9</b>

**h%:** % to be read Horizontally

**Table 12:** Percentage of women screened for cervical and breast cancer

	Total Sample	Pelvic Examination (Up to 5 Years) h%	Total Sample	Pap Smear Test (With test) h%	Total Sample	Mammography (Up to 5 Years) h%
<b>Total</b>	<b>2,236</b>	54.5	<b>1,673</b>	40.6	<b>199</b>	68.8
<b><u>Nationality</u></b>						
Emirati	<b>1,135</b>	73.7	<b>855</b>	47.5	<b>108</b>	78.7
Non-Emirati	<b>1,101</b>	66.9	<b>818</b>	33.5	<b>91</b>	57.1
<b><u>Emirate</u></b>						
Abu Dhabi	<b>796</b>	79.1	<b>556</b>	44.3	<b>77</b>	80.5
Dubai	<b>466</b>	73.1	<b>354</b>	35.6	<b>44</b>	56.8
Sharjah	<b>500</b>	66.7	<b>389</b>	38.6	<b>30</b>	63.3
Northern Emirates	<b>472</b>	65.5	<b>373</b>	41.3	<b>48</b>	64.6

Note: Only female respondents aged over 40 years were asked about mammography

**h%:** % to be read horizontally