

Statistical Appendix

Chapter 2

Definition of Statistical Terms and Indicators

Definition of variables – World Values Survey (WVS)

The WVS has polled ten Arab countries of the region in its sixth wave, which took place between 2011 and 2013 Jordan, Palestine, Lebanon, Iraq, Morocco, Algeria, Tunisia, Qatar, Yemen, and Libya. It had covered five countries in its fifth wave (around 2008), and only four countries in its fourth wave around 2000. Thus, it offers a rich set of data for the most recent period, and allows some limited comparisons through time, which helps ascertain the extent to which inter-generational change has been taking place. The WVS data has several advantages: its sample size tends to be reasonable and representative (1500 to 3000 respondents per country). Answers to questions are typically over a range (1–10), helping measure the intensity of particular values. It covers more than 90 countries, allowing for international comparisons. Some of the questions span the three waves, but not all (in particular, Political Islam).

The variables depicted in the graphs are a particular representation of the variables studied in the paper. They represent the percentage of particular populations (age or education groups), in particular countries, whose rating on a particular question (typically on a 10 scale range) is above the average rating for this group in the Middle Income group of countries, which we have constructed as the un-weighted average of all individuals from that group in all middle income countries, as provided in the 6th wave of the WVS data.

The WVS variables used in the chapter and how they are formed is described below. Factor analysis has been performed on all the indexes to ensure that they relate to the same factor.

Age: as reported, over the range 15–29.

Age: as reported, over the range 15–29. In the figures: the youth (value=1) are defined as those between the ages of 15 and 29, the low middle (2) as those between 30–44, the high middle age (3) as those between 45 and 60, and the elder as those above age 60.

Authority: is an index based on two questions, one that asks if greater respect for the authority of ones parents is a good thing, and one that asks if obeying ones rulers is an essential characteristic of democracy.

Civil engagement: is an index of how often respondents have signed a petition, joined in boycotts, or attended peaceful demonstrations during the past year.

Connectivity: is an index that measures the frequency with which respondents get information from electronic sources of information (mobile phone, email, internet, personal computer).

Dependence on family life is measured by responses to three questions on the importance of making one's parents proud, how fulfilling it is to be a housewife, and how much one trusts the family compared to the broader community.

Education: aggregated into a 1–3 scale where (1) stands for people who at most have a primary school diploma, (2) for people who have more than primary school and less than university education and (3) for people who at least start at a university program.

Gender Equality: The WVS index is based on three questions: Whether men should have more right to a job than women when jobs are scarce; whether a university education is more important for a boy than for a girl; and whether men make better political leaders than women. In Gallup, the index is based on the same first two questions as the WVS, but the third is different, and it asks about whether women should be allowed to initiate divorce.

Income: relative to rest of population, reported in a range (1, 10).

Life Satisfaction. An index based on two questions, one focusing on how satisfied people are

with their life as a whole, and a second about the degree of free choice and control over their lives.

Piety: is an index that comprises how often one attends religious services and how important they consider God in their life.

Political Islam: is constructed from answers to a question about whether religious authorities ultimately need to interpret the laws.

Preference for democracy: is a variable that estimates how often a respondent chose democracy over other strong rule when presented with three lists of options to choose from (2 choices allowed per 4 item menus that include options related to democracy, strong rule, a good economy, and a fourth choice).

Religiosity: Based on whether religious faith is an important child quality.

Religious tolerance is an index of two questions:

whether all religions should be taught in our public schools, and whether people who belong to different religions are as moral as the respondent.

Self-expression is an index of answers to 3 questions. The first two questions refer to whether imagination and self-expression are be qualities that children should be encouraged to learn at home, and the third asks whether it is important to think up new ideas, be creative, and to do things one's own way.

Social Tolerance: An index based on questions on the desirability of having neighbors that are: people of a different race; immigrants/foreign workers; people of a different religion; unmarried couples living together; people who speak a different language;

Voting: is a variable that measures answers to the question about how often people vote when elections take place.

Chapter 5

Available indicators on youth health

Patton et al.² proposed a set of indicators to measure adolescent health (up to age 24 years) and reviewed the availability of data for these indicators (measured through selected data sources - for example GSHS, GYTS, GMHS, or MICS) in selected countries within the region. Twenty-five indicators are proposed.³ Most are measured of risk meaning that the higher the percentage within the country, the worse off is youth health in that country. Where the indicator is protective (higher percentages=better health), it is noted below. For the Middle East and North Africa region, 18 countries were included, 17 are Arab league countries (MENA countries that are not Arab league countries are not listed in the table below).⁴ With respect to data availability, only seven of the 25 indicators were available in 8 or more of the Arab countries that were included in this database.

A search was conducted using PubMed and Ovid databases. The search period was 2005–2014 (second week of June). The total number of articles found using the above search strategy was 534 in the ten years included in the search. This amounts to an average of 2.4 articles/country/year. Annex 2 table A.15 indicated the number of articles found in each of subject areas and by country (the total is greater than the total number of articles, as one article could include more than one risk factor and more than one country). The highest number of articles by far is risk factors for leading causes of

death and disability adjusted life years: tobacco (n=296), psychological/mental health (n=223), obesity (n=174) and other nutrition-related/nutrients (n=100). Only 90 research studies were found around the topic of SRH among youth in the Arab region in the last ten years despite the triple burden of SRH described below – perhaps indicating the sensitivity of the topic. Fewer articles are found related to transport injuries despite its high burden of disease (n=13 only). In terms of country, Egypt, Jordan, KSA, and Lebanon have over 50 articles in that time period.

Patton et al. suggests three key recommendations to understand young people's health more clearly: (i) indicator development and measurement with the recommendation for a core set of global indicators of youth health; (ii) extending data coverage to ensure information is collected on the most marginalized, most at risk adolescents, and (iii) leadership and coordination between governments and UN agencies to both collect the data and use it to impact health. As global organizations dialogue around these issues, Arab youth, scholars, and practitioners working with young people should critically explore the adaptations needed so that the set of indicators can provide an accurate picture of our region's young people. For example, in our context, exposure to violent conflict or displacement may be a necessary addition to a set of indicators of youth health.

Although surveys are often touted as the most effective and reliable method of collecting information, they have limitations in the age group 15–29 years.⁵ Many young people in this age group may be out of school or university, making systematic access difficult. Household surveys have the limitation of contact with parents or guardians in requesting access to young people around sensitive topics. Facility-based surveys are limited to those who attend the facility for a particular condition. Creative ways to collect data on health, well-being, and risk factors need to be considered. Digital and social media platforms may be one way, but may not reach all youth.

Indicators	Data Source	Age-group	Arab countries reporting
RISK FACTORS			
Gross enrollment rates in early secondary education	UNESCO	Not stated	All
Youth unemployment	ILO	15–24 years	Bahrain, Egypt, Iran, Jordan, Kuwait, Lebanon, Morocco, Qatar, Saudi Arabia, Syria, Tunisia, UAE
Early marriage before 18 years	UNICEF global database (MICS, DHS, national surveys)	<18 years	Algeria, Egypt, Iraq, Jordan, Lebanon, Morocco, Syria, Yemen
Underweight	GSHS, HBSC	13–15 years	Egypt, Jordan, Lebanon, Libya, Morocco, Syria, UAE, Yemen
Overweight	GSHS, HBSC	13–15 years	Egypt, Jordan, Lebanon, Libya, Morocco, Syria, UAE, Yemen
Childbirth before 18 years	UNICEF global data	<18 years	Egypt, Jordan, Morocco,
Maternal mortality	Household surveys	15–19 years, 20–24 years	Bahrain, Egypt, Iraq, Kuwait, Morocco
Mortality overall and by age group (4 indicators)	WHO mortality database	overall 10–24 years; and for 10–14 years, 15–19 years, and 20–24 years	Bahrain, Egypt, Kuwait
Mortality from traffic injuries	WHO mortality database	overall 10–24 years; and for 10–14 years, 15–19 years, and 20–24 years	Bahrain, Egypt, Kuwait
Mortality from self-harm	WHO mortality database	overall 10–24 years; and for 10–14 years, 15–19 years, and 20–24 years	Bahrain, Egypt, Kuwait
Mortality from violence	WHO mortality database	overall 10–24 years; and for 10–14 years, 15–19 years, and 20–24 years	Bahrain, Egypt, Kuwait
Prevalence of any axis one mental disorders	GMHS	18–24 years	Iraq, Lebanon
Unmet need for mental health treatment in those with axis one diagnosis	Personal communication	18–24 years	Iraq, Lebanon
Binge drinking in past 30 days	GSHS, HBSC	13–15 years	Lebanon, Syria
Cannabis use in past 30 days	GSHS, HBSC	13–15 years	Morocco
Prevalence of sexual activity by 15 years	GSHS, HBSC, MICS	<15 years or 13–15 years depending on data source	None
HIV prevalence	DHS, MICS	15–24 years	None
PROTECTIVE FACTORS			
Physical activity for more than 60 each day / week	GSHS, HBSC	13–15 years	Algeria, Egypt, Jordan, Kuwait, Lebanon, Libya, Morocco, Oman, Syria, Tunisia, UAE, Yemen
Parent or guardians understand worries most of the time	GSHS, HBSC	13–15 years	Egypt, Jordan, Lebanon, Libya, Morocco, Oman, Syria, Tunisia, UAE, Yemen
Self-rated health	GSHS, HBSC	13–15 years	None
Condom use at last high risk sex	UNICEF unpublished	15–24 years	None
HPV vaccination rates	Unknown	Females 10–19 years	None
Use of health services in past 12 months	Unknown	15–19 years	None

Endnotes

- ¹ Moaddel & DeJong 2014.
- ² Patton and others 2012.
- ³ The 25 indicators include: mortality data (4 indicators), maternal deaths, HIV prevalence, mental disorder, tobacco use, binge drinking, cannabis use, underweight, overweight, physical activity, parental understanding, self-rated health, sex by 15 years, unemployment, early marriage (before 18 years), early childbirth (before 18 years), secondary education, HIV knowledge, condom use, HPV vaccination, unmet mental health, and health services use.
- ⁴ Countries reviewed included: Algeria, Bahrain, Egypt, Iran, Iraq, Jordan, Kuwait, Lebanon, Libya, Morocco, Oman, Qatar, Saudi Arabia, Syria, Tunisia, Turkey, United Arab Emirates, and Yemen
- ⁵ Patton and others 2012.