Insights from UNFPA Usage of the UNSD DYB: Assessment of Death Registration and Marriage Registration

Romesh Silva, Ph.D. Technical Division, United Nations Population Fund

Expert Group Meeting on UN DYB System UN Statistics Division November 10, 2020



Background

- UNFPA actively uses the UN DYB System to guide our CRVS technical cooperation to National Authorities
 - basis for assessing strengths and limitations of Civil Registration Systems around the world
 - evidence on national capacity in production and dissemination of vital statistics (from civil registration data)
- Life-course approach to CRVS birth, marriage, divorce, death registration consistent w/ UN Legal Identity Agenda
- Specific Focus = Gender Dimensions of CR Systems and Vital Statistics Production/Dissemination/Usage:
 - Assessment of death registration completeness and quality
 - Strengthening of marriage/divorce reg'n & nuptiality statistics
 - Linkage b/w death registration and maternal death surveillance systems







Focus – Completeness Assessment of Vital Event Registration and 2030 Agenda

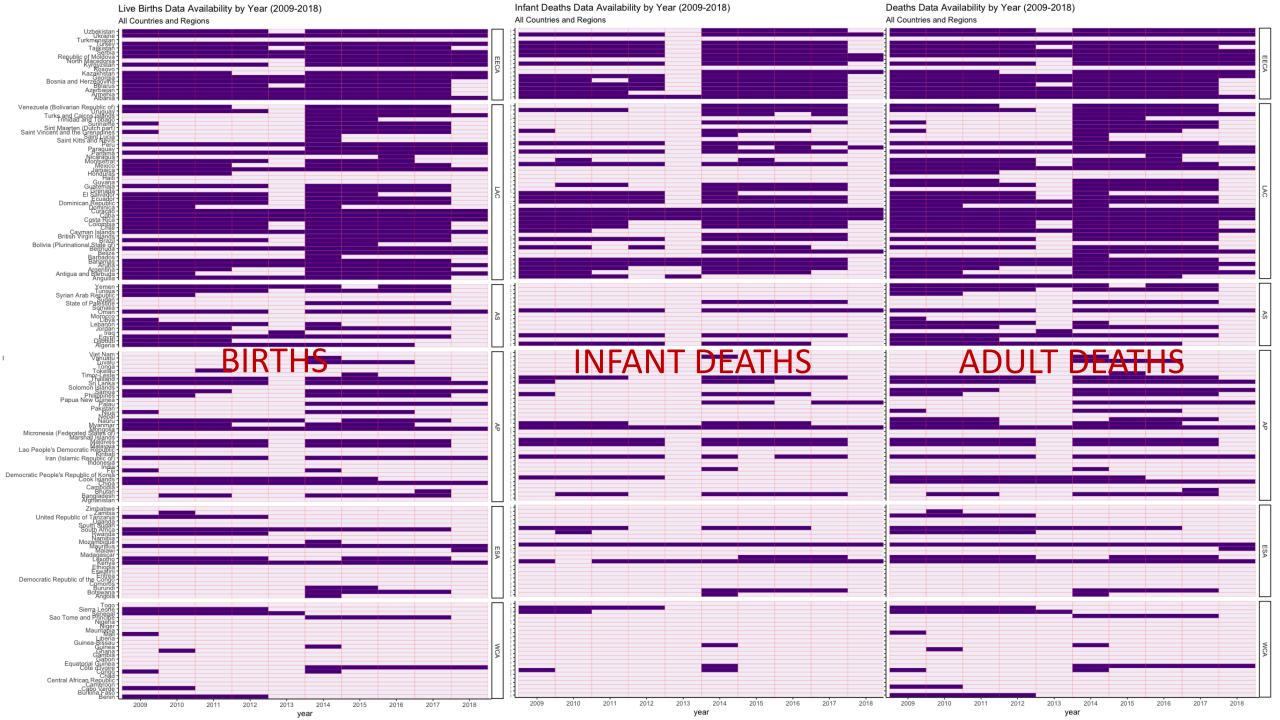


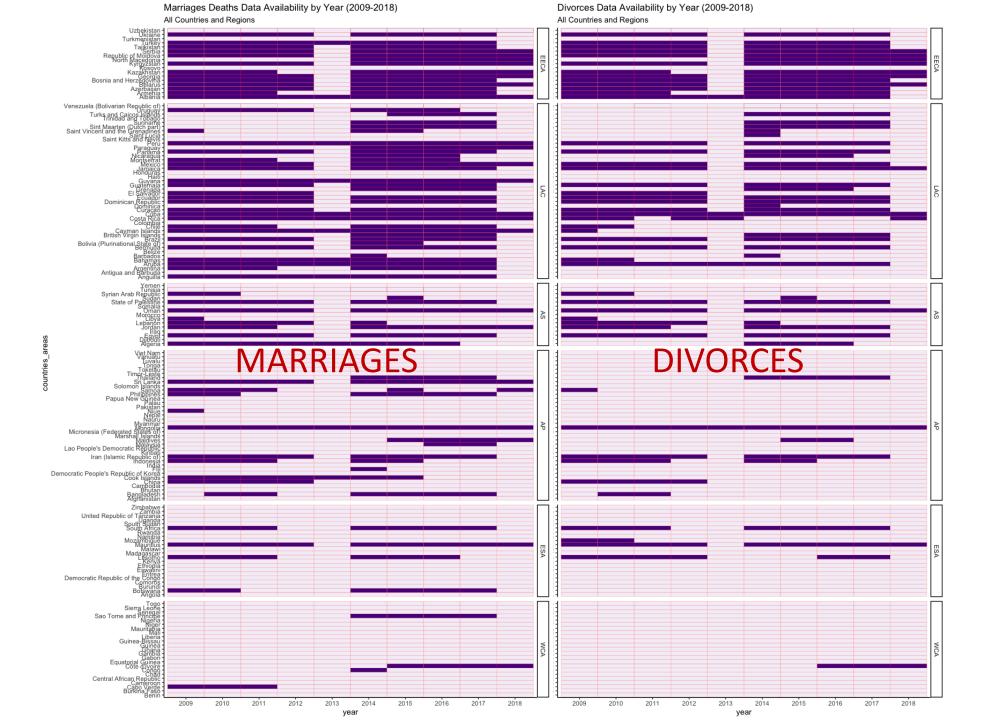
United Nations Statistics Division - Demographic Statistics Section						
Questionnaire on Vital Statistics						
Quality of vital statistics obtained from civil registration						
I. Basis of tabulation	Live births	Deaths	Infant deaths	Late foetal deaths	Marriages	Divorces
Present basis of tabulation:						
- date of occurrence						
- date of registration						
How long has the present basis of tabulation been used?						
II. Estimated completeness of registration	Live births	Deaths	Infant deaths	Late foetal deaths	Marriages	Divorces
100 per cent						
90 - 99 per cent						
80 - 89 per cent						
70 - 79 per cent						
60 - 69 per cent						
50 - 59 per cent						
Under 50 per cent						
Please specify:						
(a) Year(s) to which completeness estimate refers						
(b) Basis of completeness estimate						
-Demographic analysis						
-Dual record check						
-Questions in population census						
-Questions in sample surveys						
-Other (specify)						
-No evaluation						
Please include any reports describing completeness of registrati	on and metho	ods used in	arriving at estin	nated completeness	3:	

- 15 of the 17 SDG Goals and 24 of the SDG targets require civil registration data – either as numerators (births, deaths) or denominators (total population, live births, total deaths)
- SDG Target 17.19.2(b): Proportion of countries that have achieved 100 per cent birth registration and 80 per cent death registration
- SDG Target 16.9.1: proportion of children <5yo whose births have been registered with civil authority, by age
- IAEG-SDG "Minimum" Disaggregation Matrix: Geog location, Sex, Age, Race/Ethnicity, Migrant Status, Disability





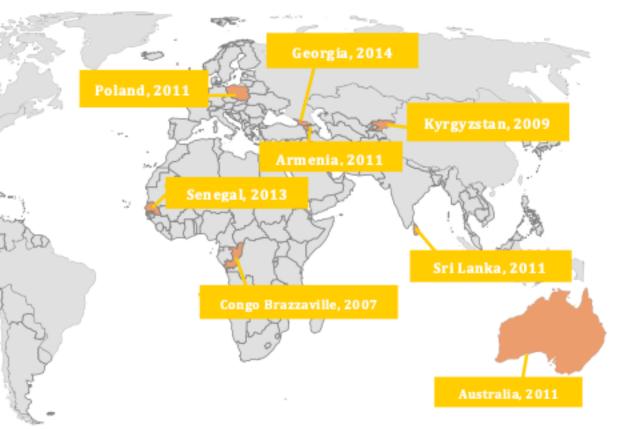




Marriage Registration – Notable Gender dimensions, but oft neglected



Countries that included questions about marriage registration in the 2010 round of Population Censuses



Reported Number of Marriage Completeness Assessments, UNSD DYB 2010-2018

Method	2010	2011	2012	2013	2014	2015	2016
Census	0	0	0	1	1	0	1
Surveys	0	1	0	0	0	0	1
Demographic Analysis	8	12	5	12	8	8	4
Dual Record check	5	8	2	5	6	7	4
Other	1	3	0	3	2	3	1
Total	14	24	7	21	17	18	11

In most recent years, of the countries reporting marriage registration completeness in the UN DYB system:

- 19 reported 90+% completeness
- 1 reported 75-89% completeness
- 3 reported "No evaluation"

ightarrow incomplete and selective reporting



Death Registration Completeness: Notable sex differentials

Death Registration Completeness (%) by Sex

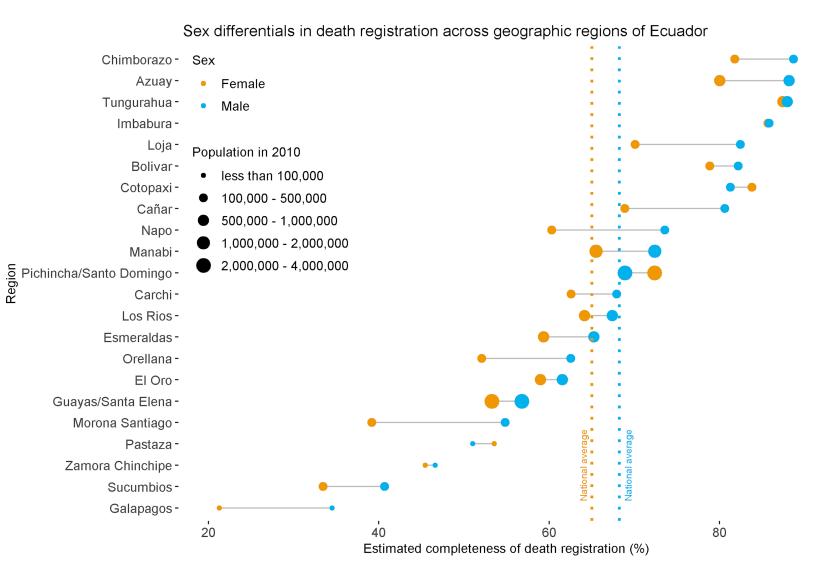


Female Male

Con **ERGE**

Death Registration Completeness: Subnational Sex differentials can vary substantially

Source: Peralta et al. (2019); Ecuador National Institute of Statistics and Census (INEC)



- Notable variation in death registration completeness b/w regions
- Female death registration is notably less complete in almost all regions
- Massive implications for gender equity in allocation of population health resources

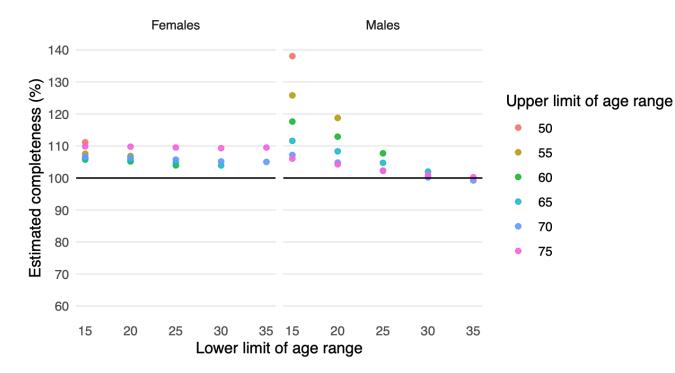


Death Registration Completeness: Type and Calibration of Method Matters

Death registration completeness estimates by sex, Tunisia, 2004–2014.

Sex	GGB	SEG	GGB-SEG	Harmonic mean of DDMs	Model 1 (c.i.)	Model 2
Females	105.5	90.9	103.9	99.7	$93.8\ (93.1 - 94.5)$	88.0
Males	106.1	103.2	99.2	102.8	$95.4\ (94.8-95.9)$	89.1

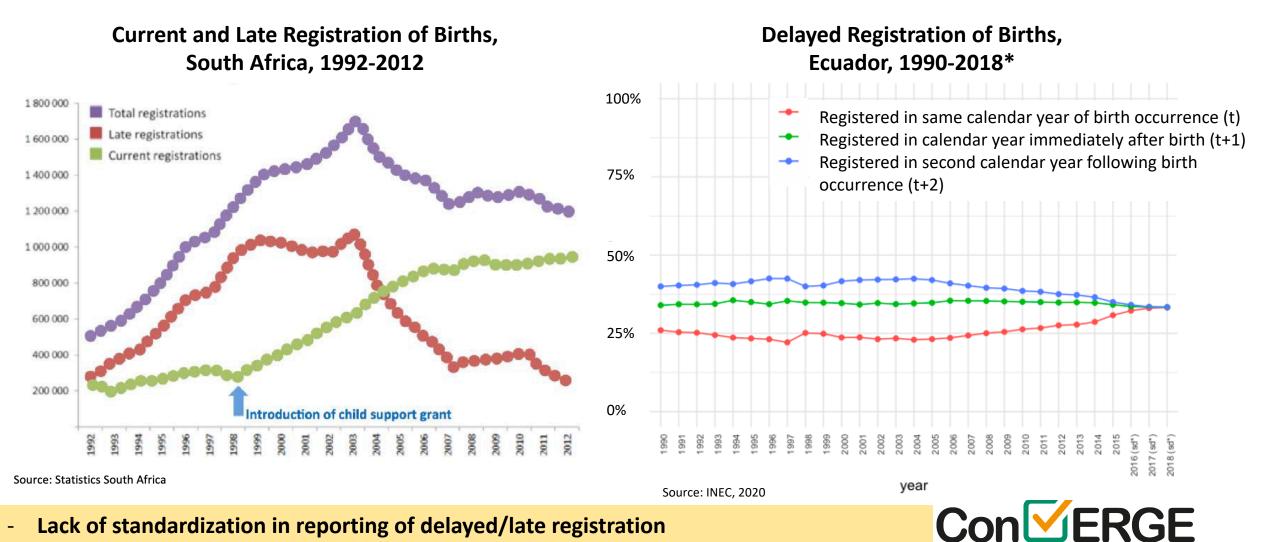
GGB-SEG Completeness Estimates, by Specified Age Range



- Notable variability/sensitivity in completeness estimates
 - by DDM method
 - Age range choice



Delayed Registration of Vital Events



- Lack of standardization in reporting of delayed/late registration -
- Very few countries report regularly on delayed registration of deaths, marriages, divorces

Recommendations & Suggestions • • UNFPA

- 1. Sex-disaggregated monitoring of vital statistics is a crucial tool to identify gender disparities and guide systems strengthening
- 2. Consideration of incorporating sex-disaggregated reporting of death reg completeness in future DYBs, explore viability of other SDG dimensions of disaggregation (geography, age, etc.)
 - But subnational disaggregation is challenging due to limitations of indirect methods and migration data/assumptions
- 3. Type and Calibration of Method matter potential need for more structured guidance
 - 1. Include direct references to UN-PRVS in DYB Questionnaire to guide NSOs
 - Report point estimates and confidence intervals of completeness estimates, instead of ranges (<50, 50-75,75-89, 90+)
 - Provide clearer response categories on method type e.g. type of indirect method – GGB, SEG, GGB+SEG, etc.
 - 4. Strengthen metadata on calibration of method disclose all data sources (and their years), report age trims

Recommendations & Suggestions

- 4. Marriage and divorce registration are oft neglected.
 - Highly-selective reporting by countries of completeness assessment statistics
 - VS on nuptiality and divorce requires strong inter-ministerial coordination
- 5. Delayed registration of vital events is a major issue in many countries. Some NSOs/CRs report delayed/late birth reg. Very few report delayed death, marriage, divorce registration.

