GENDER 101 COURSE

Module 3: Gender Data Analysis

Overview

Data analysis is an organized approach of considering issues and determining insights from collected data. At this stage in the lifecycle, gender data in the lifecycle should be properly sex-disaggregated.

What is gender data analysis?

Gender data analysis goes beyond just "sex-counting." Gender data analysis is the systematic methodology of examining the differences in women and men, girls and boys. These differences include gender roles, power levels, and opportunities.

Jhpiego's Gender Analysis Toolkit for Health Systems separates gender analysis into two parts:

1. "The first part is a process to identify inequalities, gaps, and disparities in a particular context. [Reviewing] gender roles, relations, and identities related to specific health problems to identify gaps and disparities based on gender differences.
2. “The second part of the analysis entails analyzing the information collected on gender differences to determine and prioritize gender-based constraints and opportunities and their implications for... equal status of women and men." (Caro 2009)

WeAllCount's Intersectional Pay Equity - Example Gender Data Analysis:
https://www.youtube.com/watch?v=sMBhJHELb8s

Take this poll

Have you conducted an intersectional analysis like the one shown in We All Count's video?

- ☐ Yes
- ☐ Similar, but not exactly.
- ☐ No
- ☐ I'm not sure.

Connections to our Case Study

Rumy is moving forward with her data. She has collected and processed data from household surveys. She now needs to conduct a thoughtful analysis.

Rumy has the following questions for her next steps:

- What common challenges should she be aware of?
- What framework should she use for analysis?
- What examples of analysis exist that compare to her data?
- What should she be looking for?

Common Challenges

Common Challenges when Analyzing Gender Data

Put simply, gender data is difficult to analyze because of all the interacting factors at play. It is imperative that when begin conducting analysis that we are mindful of certain things. First, it is important to fully vet and understand the source of your data. Some information can be found in metadata, which is defined below. Second, you must understand the key terms in gender data analysis. These include, but are not limited to, ratio, rate, percentage, percentage points, mean, and median. Lastly, we must be aware of the numbers we are looking at. What is the full context of the statistic?

Adapted from UN Women's Presentation on Common Mistakes when Interpreting Data (shared below)

1. Examining Metadata

As you begin to analyze gender data, you will encounter metadata. Metadata is information about the data. This information includes general information about the dataset(s). It often includes definitions, rationale, methodology descriptions, and information about outliers. Metadata usually appears in footnotes or near the dataset description. You should always look at the metadata to avoid misinterpretation and assess the relevance of the data to your analysis.

2. Clarifying Semantics

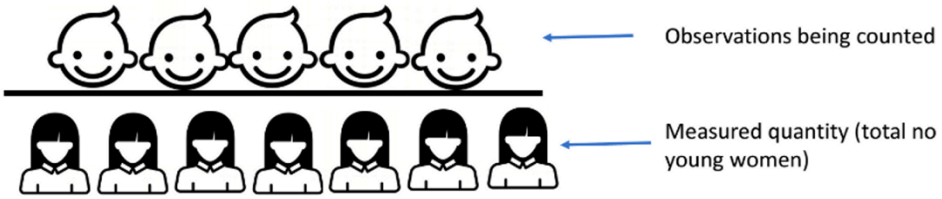
Oftentimes, challenges arise in data analysis when data is misunderstood. Therefore, it is important to understand the semantics in data analysis. Semantics is the meaning of a word or phrase in context. There are key definitions you must understand when analyzing data.

Ratio: compares the frequency of one value for a variable with another value of the same variable.

Example: In a total of 20 coin tosses where there are 12 heads and 8 tails, the ratio of heads to tails is 12:8.

Rate: a measurement of one value for a variable in relation to another measured quantity.

Example: Adolescent birth rate is the number of births to ages 15-19 per 1,000 women in that age group.



Proportion: number of times a particular value for a variable has been observed, by the total number of values in the population.

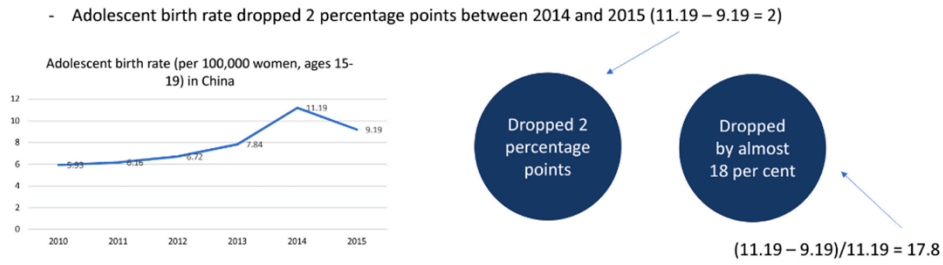
Example: Proportion of seats held by women in national parliaments is the seats occupied by women over the total seats.

Percentage: expresses a value for a variable in relation to a whole population as a fraction of one hundred.

Example: Proportions are often expressed in the form of percentages like 3 out of 12 hours spent on unpaid work = 25% of the time spent on unpaid work.

Percentage Points: used to express increments, drops, or differences. It represents decimal points. These are different from percentages.

Example:



Mean: the arithmetic average of a set of numbers or distribution. It is the most commonly used central tendency of a set of numbers. It is used for normal distributions and it is not robust, as it is influenced by outliers.

Median: the numeric value separating the higher half of a sample, a population, or a probability distribution, from the lower half. It is used for skewed distributions. It is computed by listing all numbers in ascending order and locating the number in the center of the distribution.

Read more from the source below:
https://datadotorg.box.com/s/bjk737yxqbllwr1b0wecutqldpqw85qv

We All Count's Not Your Average Average: https://youtu.be/-gaPmBMx8V0

3. Danger of Looking at Totals

Increases in numerator cannot be looked at without looking at changes in the denominators.

For example: 750 Million: More Women Live in Poverty Than 20 Years Ago

Proportion of population below the international poverty line, by sex, age, employment status, and geographical location (urban/rural)

- Total population has increased dramatically since then
- Actual poverty rates have dropped

4. Issues with Gender-Based Violence and Crime Data

Gender-based violence is always underreported.

Not every crime is brought to the authorities. Thus, registries are often incomplete.

Assessing the prevalence of violence is always more accurate via specialized surveys.

- Respondents are more likely to tell about cases when asked.
- Specialized surveys are specifically built to build rapport with victims without asking directly.

Connections to our Case Study

Dr. Carolina Lopez is looking at aggregated datasets for COVID-19 cases and vaccination rates. She is constantly sifting through new material. She needs to make sure to:

- Adequately check the metadata and verify her sources

- Understand how data is displayed
    - What do the numbers indicate: ratio, rate, percentage, percentage points, mean, and median?
- Have holistic context of numbers
    - Is a number total misleading?

Frameworks

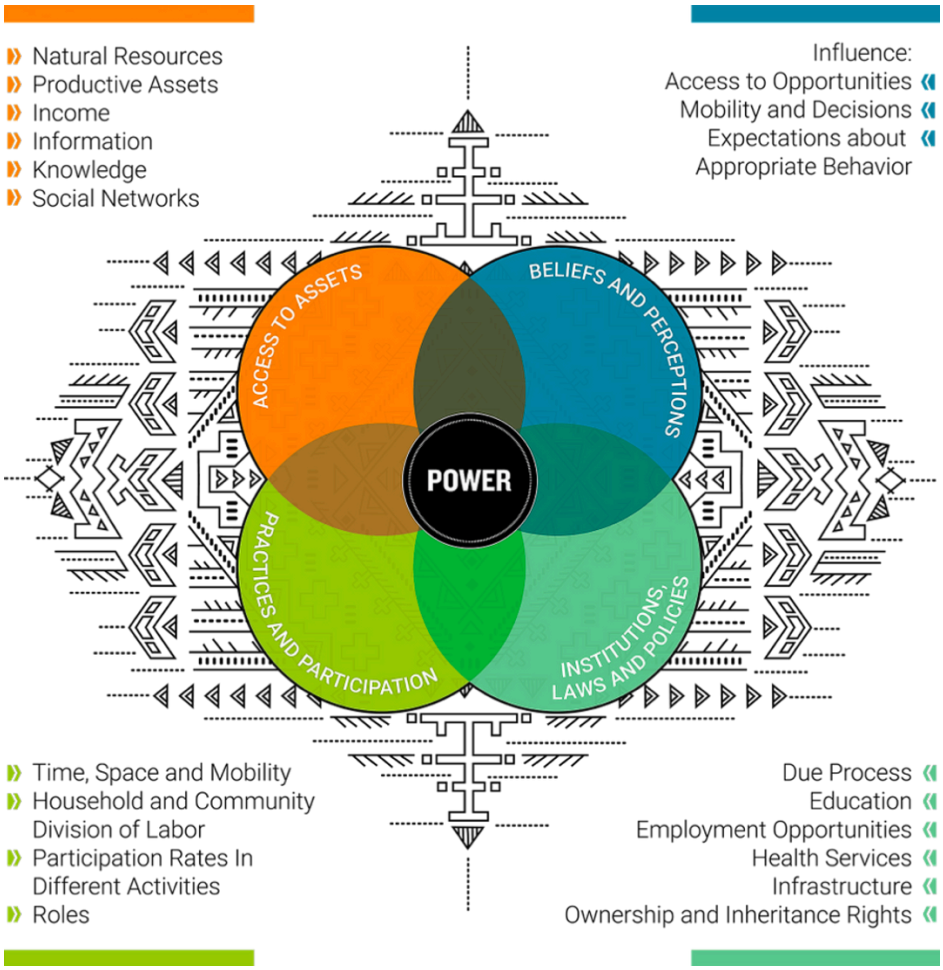
Gender Analysis Frameworks

Gender Analysis Frameworks, or GAFs, are a collection of tools for gender analysis. GAFs may provide a focused lens to guide gender analysis.

Jhpiego's Gender Analysis Framework for Health Systems (Source: Jhpiego)

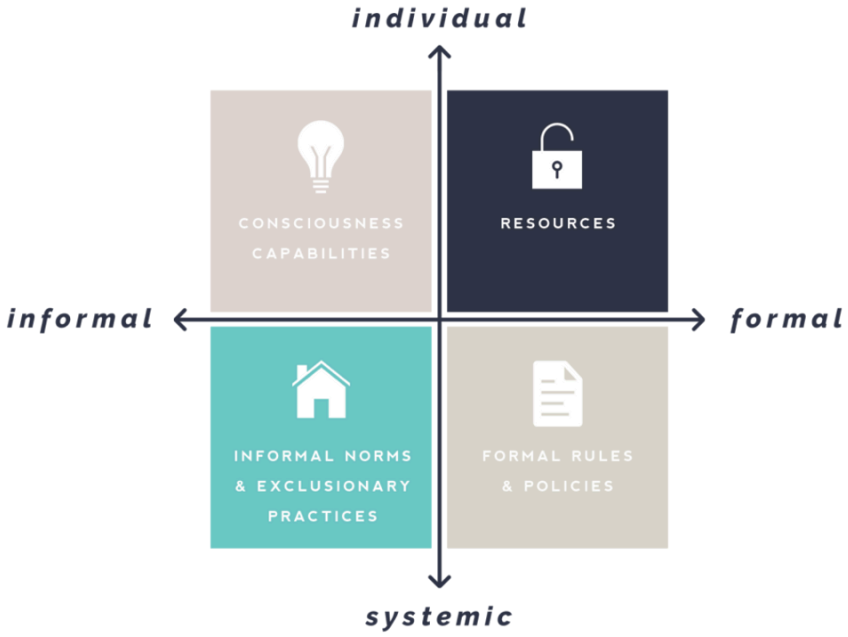
Jhiepgo's GAF categorizes the lives of women and men, girls and boys, into four main domains. All domains intersect with power. The four domains:

- access to assets
- beliefs and perceptions
- practices and participation
- institutions, laws, and policies



Gender at Work Framework (Source: Gender at Work)

Gender at Work Framework can be used by change agents to uncover opportunities and barriers to gender equality, map strategy for change, and guide evaluations of progress. The top two quadrants are related to the individual. The right quadrants are changes in individual conditions and the left is individual consciousness and capability. The bottom two quadrants are related to the system.



Harvard Analytical Framework (Source: Wikipedia)

The Harvard Analytical Framework, also known as the Gender Roles Framework, aims to identify the type and amount of work that men and women do in a household or community. The framework has three parts of inquiry:

1. Activity: Who does what? When? Where?
2. Access and Control: Who has access to what? Who has control over what?
3. Influencing Factors: What influences the division of labor and the access and control?

Additional Gender Analysis Frameworks

Do you know of or use a GAF that should be mentioned here?

Further Guidance for Frameworks

In addition to selecting a Gender Analysis Framework, we recommend integrating guidance, such as incorporating the feminist monitoring, evaluation, accountability and learning (MEAL) foundations. For example, Oxfam's Feminist MEAL Guidance Note's emphasis on fluidity and collectivism is an intersectional mindset for any data analysis.

Oxfam's Feminist monitoring, evaluation, accountability and learning (MEAL) (Source: Oxfam)

Feminist Monitoring, Evaluation, Accountability and Learning (MEAL) is based on the understanding that transformative change in unequal gender and power relations is complex and non-linear. It challenges us to think differently about what is considered evidence, pushes the boundaries of how evidence is captured, questions who gives knowledge meaning and power, and promotes social transformation.

Download the report here

Case Study

COVID-19 and Vaccinations Gender Data Analysis

There is tremendous pressure for organizations and governments to act immediately regarding COVID-19 and vaccinations. Therefore, data analysis of the COVID-19 and vaccinations is happening right now. However, this means that specifically, gender analysis may come as an afterthought. It is imperative that data is analyzed with diverse perspectives, especially because COVID-19 does have gendered effects. In this section, we will go over how Dr. Lopez and Rumy will conduct their gender data analysis.

Dr. Lopez and Gender Data Analysis

Dr. Lopez is consulting many sources in her analysis of her collected gender data.

Dr. Lopez is primarily concerned with her own U.S. city's COVID-19 and vaccination data. She has aggregated data from hospitals and clinics to analyze. In Activity 2, we will brainstorm her next steps.

Some current sources of COVID-19 and vaccination's gender implications include (we encourage you to read at least one of the following):

- COVID-19 affects men and women differently. So why don't clinical trials report gender data? (Science.org)
- UN Women's COVID-19 Emerging Gender Data and Why it Matters

- CARE's Gender Implications of COVID-19 Outbreaks in Development and Humanitarian Settings
- UN Women's Surveys Show that COVID-19 has Gendered Effects in Asia and the Pacific

Rumy and Gender Data Analysis

Rumy is consulting many sources in her analysis of her collected gender data on households and other socioeconomic factors. Rumy is primarily concerned with her own city's COVID-19 and vaccination data. She has aggregated data from her own survey and is comparing them to national and international sources. In Activity 2, we will brainstorm her next steps.

Some current sources of COVID-19's impact on gender and socio-economic status include (we encourage you to read at least one of the following):

- Household Monitoring Systems to Track the Impacts of the COVID-19 Pandemic
- UN's Shared Responsibility, Global Solidarity: Responding to the socio-economic impacts of COVID-19
- Facebook's Survey on Gender Equality at Home Report
- UN's Rapid Gender Assessments of the Socioeconomic Impacts of COVID-19

Activities

Example Gender Data Analysis

- Step 1: Review the "Women and Heart Health" content below.
- Step 2: Answer the following questions
    - Out of the 6 terms below, choose 3 to find examples for:
        - ratio
        - rate
        - percentage

        - percentage point
        - mean
        - median
    - If you were to further research women and heart health and conduct a study, which gender analysis framework would you choose to employ? Why? (4-8 sentences)
    - Select one particular gap or inequality from the example of women and heart health:
    - How would you further explore this gap or inequality? (using collection/processing methods, tools, etc.)
    - If you drew information from sources other than what is listed below, please cite your sources!
    - Comment on at least one other participant's post.
- Step 3: Join the discussion!

Women and Heart Health

- Read the following recommended resources:
    - Heart Disease Affects Women Differently: What We Can Do About It (Source: Healthline)
    - Cardiology's Problem Women (Source: The Lancet)
- Watch the following video:
    - Heart Disease in Women: https://youtu.be/2sclsaO8NjA
- When you think of a "normal person"? Who do you picture? What attributes do they have?

The Mythical Norm

"Somewhere, on the edge of consciousness, there is what I call a mythical norm, which each one of us within our hearts knows “that is not me.” In America, this norm is usually

defined as white, thin, male, young, heterosexual, Christian, and financial secure. It is with this mythical norm that the trappings of power reside within this society. Those of us who stand outside that power often identify one way in which we are different, and we assumed that to be the primary cause of all oppression, forgetting other distortions around difference, some of which we ourselves may be practicing." - Audre Lorde, Excerpt from "Age, Race, Class, and Sex: Women Redefining Difference" (1984).

Next Steps in COVID-19 Gender Data Analysis

- Step 1: Choose one persona: Dr. Lopez or Rumy?
- Step 2: Answer the following questions according to your chosen persona below.
- Step 3: Join the Discussion!

Dr. Lopez's Questions

Dr. Lopez is primarily concerned with her own city's (Washington, D.C.) COVID-19 data. She has aggregated data from local nursing homes, hospitals, and clinics to analyze.

She is currently looking at this dataset: The COVID-19 Sex-Disaggregated Data Tracker

1. Describe the metadata of this dataset (Where is the data sourced? If there are multiple sources, list just a few)
2. What specific data category should Dr. Lopez focus on and why? (For example: Men in Thailand and their COVID-19 death rate)
3. In what ways could a Gender Data Analysis Framework help Dr. Lopez's analysis?

Rumy's Questions

Rumy is primarily concerned with the impacts of COVID-19 pandemic on households in different countries. She is currently looking at this dataset.

- Household Monitoring Systems Dashboard
- Household Monitoring Systems to Track the Impacts of the COVID-19 Pandemic
    - Vietnam

- Sierra Leone
- Burkina Faso
- (Choose your own)

You may notice that the Household Pulse data is not necessarily sex-disaggregated. Pick ONE country and answer the following questions.

1. Which country did you choose?
    - Describe the metadata of the data (Where is the data sourced? If there are multiple sources, list just a few)
2. What specific data category should Rumy focus on and why?
3. In what ways, if any, could a Gender Data Analysis Framework help Rumy's analysis?

Mid-course Reflection

We are almost halfway through the course. Write a few sentences reflecting upon your experience so far (4-8 sentences). You may consider consulting your profile for the goals that you outlined for yourself at the start of the course.

- What have you learned?
- What would you still like to learn?
- What has been your favorite resource so far?
- Do you have any suggestions for future iterations of the course?