Launch of Global Center of Excellence on Gender Statistics and the First Global Conference on Gender Equality and the Measurement of Unpaid Care and Domestic Work
Lessons from Canada: *What can GIS information tell us about gender & unpaid work?*
Unpaid Care Work
(https://ghw.mcmaster.ca/)

- Universal
- Social, Cultural, Policial contexts vary geographically
- Impacted by the social determinants of health
- Gendered
- Time-space tensions = negative outcomes for carers
- Carer-employees & Carer-Friendly Workplaces
8.1 million Canadians are carers (1 in 4 Canadians)

50% of carers are between the ages of 45-65 their peak earning years

70-80% of community care for older adults is provided by carers

6.1 million carers are juggling their work and caregiving responsibilities

54% women

46% men

Carers spent $12.6 million in 1 year on expenses related to their caring role

Infographic Credit: Carers Canada
* 6 million CEs (Canada) representing 35% of total workforce
A New World of Research Opportunity

- GIS – Geographical Information Science

1. Measuring Spatial Access to Health/Social Care Services
2. Critical/Feminist geographies - Measuring Time-Space Vulnerability
GIS: An Integrating Technology

- Census Tracts
- GPS Tracking
- Time-Use Data
- Gender
- Occupational Status
Limited Spatial Data Availability for Time-Use Data

**Domestic Work**
- Meal prep/cleaning
- Clothing care
- Cleaning
- Shopping
- Obtaining services

**Home Care/Maintenance**
- Financial management
- Plant/garden care
- Home management

**Caregiving**
- Physical & medical care
- Education
- Other care
- Travel related to caregiving
### Axis of Time vs. Axis of Space

**Time**
- Unpaid work has traditionally been examined temporally
- Axis of time prioritized via weekly/daily time-use surveys, etc.

**Space**
- Unpaid work has not yet been fully explored across space & provides an exciting opportunity for enhanced understanding through visualization
- Spatial data required!
1. Measuring Spatial Access to Health/Social Care Services
   - **People** – locations, numbers, demographic, health needs
   - **Providers** – locations, numbers, characteristics, quality, acceptability
   - **Proximity** – distance, travel time, transportation access

Used for Planning
   - Primary care
   - Social care
   - Adjunct services
Using GIS to characterize neighborhood environments

Study Area (Dardas, 2018)
Service Zones with/out Public Transit (Dardas, 2018)
Accessibility Scores with/out Public Transit (Dardas, 2018)
Potential Demand Zones (Dardas, 2018)
Space-Time Series

Credits: Mei-Po Kwan
2. Critical/Feminist Approaches to Measuring Time-Space Vulnerability
   • Non-employment activities (inclusive of unpaid labour)
   • Volunteered Geographic Information (VGI)
A close-up view of activity patterns in geographic space (Kwan, 2000)
Gendered Experience (Kwan, 2000)

Space-time activity density of non-employment activities for women employed part-time

Space-time activity density of non-employment activities for men employed part-time
Gender difference in the density of non-employment activities between women and men employed part-time (Kwan, 2000)
Females Underreporting (Ferster et al, 2017)
Activity spaces do not correspond to geopolitical units

Concept mapping (Burke et al. 2005)
Opportunities

• Unpaid work in time & space in its inception

• volunteered geographic information (VGI) = low hanging fruit

• Availability geographically variable across the globe

• Policy/practice implications
Thank you!
Questions/Comments?

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References


