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Characteristics of Urban Care Recipients in Singapore, China and Indonesia

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Hypothesis

- While Asian values and practices of filial piety drive the extent of informal care received in all three countries, how public institutions are set up to provide healthcare and social welfare will influence the extent of care received.

Characteristics of Urban Care Recipients

- Family network
  - Primary or sole caregiver
  - Secondary caregiver
  - Same generation or multi-generation
- Household income
- Types of old age benefits available
  - Health and social care utilization
- Only studying older adults in urban centers
  - Some extent of old age benefits are available
  - May then not be entirely dependent on the family network for elder care

Demographics by Country

Singapore	China	Indonesia
• 3.9 million citizens & PR • An aging society, 8.9% aged 65+ • Life expectancy = 79 years (M) and 84 years (F) • TFR = 1.16 (2010)	• 1.3 billion population • High absolute number,108 million aged 65+ • Life expectancy = 71.4 years (M) and 74.8 years (F) • TFR = 1.63 (2008)	• 234 million population • High absolute number,13.9 million aged 65+ • TFR = 2.3 (2008) • Life expectancy = 67 years (M) and 70 years (F) • Variation in % of older adults across provinces

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Healthcare and Social Welfare Systems for Older Adults by Country

Singapore	China	Indonesia
• GDP per capita = US$36,738 (2008) • Public spend on healthcare = 31.9% of total spending • Individual medical savings accounts; personal responsibility • Informal family care with FDW • Institutionalized care = 3% of persons 65+ (2010)	• GDP per capita = US$3,414 (2008) • Public spend on healthcare = 49.9% of total spending • Multigenerational family care • *Bao-mu* as care provider • Socialist welfare system, homes for "Three-No" elders • Institutionalized care <2% of persons 65+ (2003)	• GDP per capita = US$2,172 (2008) • Public spend on healthcare = 45.5% of total spending • Self-care with support from children • Older Indonesians, self-reliant; 25% of women 65+ and 50% of men 65+ remain in labor force (2002) • Public health care = *puskesmas* and *posyandu lancia* • No institutionalization?

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Data and Empirical Specification

Singapore

- Singapore Informal Caregiver Survey 2010 with 1,190 non-institutionalized respondents aged 75+
- Restricted sample to urban respondents, age 75+ with ≥1 ADL limitation, n = 988

China

- Chinese Longitudinal Healthy Longevity Survey (CLHLS) Wave 5, 2008 – 2009 with 16,540 respondents across 22 out of 31 provinces
- Restricted sample to urban respondents, age 75+ with ≥1 ADL limitation, n = 1,077

Indonesia

- Indonesia Family Life Survey (IFLS) Wave 4, 2007 with 44,103 respondents across 13 out of 26 provinces
- Restricted sample to urban respondents, age 60+ with ≥1 ADL limitation, n = 237; lower cutoff age

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Data and Empirical Specification

- Main outcome variable = amount of time the care recipient receives for assistance with ADL limitations
- Explanatory variables for how much informal care received = care recipient's family network, socio-economic characteristics, ADL limitations, self-rated health, health & social care utilization; and old age benefits by country
- Ordinary least square (OLS) linear regressions for descriptive analysis

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Descriptive Statistics – Family Network

	Singapore	China	Indonesia
Variable	Means (SD)		
Care Received	14.13 hours / week (13.77)	60.12 hours / week (62.95)	19.62 days / last month (10.67)
			4.56 hours for each day of care (4.38)
Age	83.10 (5.34)	96.36 (7.47)	71.97 (7.90)
Household Size	4.37 (1.85)	2.46 (1.27)	2.10 (0.74)
Variable	Percentage Distribution		
Primary CG for Female CR	Daughter = 72.23%	Daughter = 27.93%	Biological Child = 35.97%
Primary CG for Male CR	Daughter or Son = 49.84%	Son = 34.24%	Wife = 70.42%
Female	68.52%	65.83%	68.78%
Widowed	64.98%	87.93%	33.76%

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Descriptive Statistics – Income

	Singapore	China	Indonesia
Monthly HH Income	< SGD$500=7.19% $500 – $999=12.85% $1,000 - $1,999=19.43% $2,000-$2,999=16.9% $3,000-$3,999=11.64% $4,000-$4,999=7.49% ≥$5,000=15.79% No response=8.70%		
Has a Medical Savings Account	75.81%		
Annual HH Income		Means = 10.12 log points SD = 1.12 log points	
Educational Level (Proxy for Income)			No Formal Schooling =42.87% Elementary School = 17.58% Junior High=21.97% Senior High=15.38%

Descriptive Statistics – Old Age Benefits / Health & Social Care Utilization

Country	Percentage Distribution
Singapore	
Hospitalized in the previous 6 months	22.27%
Uses home medical services	2.2%
Uses the elderly day care center	1.62%
Uses home help services	0.71%
China	
Has old age insurance	14.11%
Receives free public medical services	13.28%
Receives collective medical services	12.63%
Indonesia	
Has health insurance	9.2%
Visited the *posyandu*, last month	6.33%

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Findings – Selected OLS Estimates (SE)

	Singapore	China	Indonesia
Outcome Measure	Hours Received from the Primary Caregiver for ADL Limitations, per Week	Hours Received from the Family Care-giving Unit for ADL Limitations, per Week	Days of Assistance Received with Primary Activities, Last Month
Age	0.1237 (0.1300)	0.8623** (0.3074)	0.0290 (0.0957)
Care Recipient is Female	1.3156 (1.073)	8.1838 (5.1152)	0.6656 (2.1147)
Married	1.5677 (1.0757)	-3.7721 (7.0390)	0.3161 (2.2801)
Household Size	-0.3336 (0.174)	-0.4365 (1.6388)	3.6814** (1.2467)
Has a Secondary Caregiver	-0.8378 (0.5962)		-4.9302** (1.6241)
Has a *Bao-Mu*		-17.6553** (6.4027)	
Household Income	-0.7630*** (0.2148)	1.036 log points (2.7633)	
Has a Formal Education (Proxy for Income)			7.7273*** (1.8055)
Collective Medical		-11.4563** (6.0869)	
Public Health Insurance			6.3523** (2.3800)
ADL Limitations	0.8312** (0.2442)	9.6726*** (1.1470)	0.4061 (0.4064)
Posyandu			-11.8416** (3.6218)

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Preliminary Findings – Family Network

- A larger Indonesian household increases assistance received with primary activities by 3.68 days per month. Household size has no relationship with amount of care received in Singapore and China.
- In China, having a *bao-mu* as a secondary CG decreases the amount of care received from the family unit by 17.65 hours per week. In Indonesia, having a secondary CG decreases the amount of assistance received from the primary CG by 4.93 days per month.

Preliminary Findings - Income

- In Singapore, for each additional lower range of income, older adults receive 45.6 minutes (0.76th of an hour) more care per week from the primary CG.
- In Indonesia, using formal education as a proxy for income, older adults who have had formal schooling receive 7.72 more days of assistance with primary activities in a given month.

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Preliminary Findings – Public Institution Old Age Benefits

- The public institutional set up in China and Indonesia have a relationship with old age care. No relationship between the two variables found for Singapore.
- Caveat is that the findings only relate to urban dwellers who were employed in the public sector in China and Indonesia.
- In China, receiving collective medical decreases hours of family care by 11.45 hours per week.
- In Indonesia, older adults with public health insurance (i.e. *akses*) receive 6.35 more days of assistance from the primary CG. This result may be operating through the public sector retiree having had higher lifetime incomes and benefits that could perhaps be shared with family members.
- In Indonesia, older adults who utilize the *posyandu* health services receive 11.84 days less of assistance with primary activities. But utilization rates are low.

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Discussion

- The family is still the cornerstone of care for older adults in Singapore, China and Indonesia. Care appears to be multi-generational (grandchildren as CG) in China and Indonesia. There is also the important CG role of the *bao-mu* in China.
- The provision of informal care in (high income) Singapore appears to be private market driven; is elder care about full personal / family responsibility with low awareness or low willingness to look beyond the family unit for care? Why is utilization of home & community based care services low despite availability?

Discussion

- Public spending on healthcare as a % of total healthcare spending in (lower income) China and (lower income) Indonesia are much higher than in Singapore. Public benefits such as collective medical (China), public health insurance (Indonesia), *posyandu* health clinics for the elderly (Indonesia) appear to provide old age protection.
- The state (China and Indonesia) complements the family in providing care?
- Limits of the discussion, findings only apply to public sector retirees in urban centers in China and Indonesia. Also sample size for Indonesia in paper is small. What about care for the elders in rural areas?