Extended Abstract

Determinants of support among older people: A comparative study of Costa Rica, Spain and England

Karen Glaser¹, Luis Rosero², Dolores Puga³, Emily Agree⁴, Teresa Castro⁵

Global population ageing has led to considerable disquiet about future support for frail older people; however, the determinants are poorly understood. It is especially important to investigate the determinants of support in old age in developing societies with little or no government institutional protection for older people, and where current cohorts of older people are survivors of undernourishment, multiple diseases in early life, and have accumulated few savings.¹ Moreover, the developing world has also experienced numerous changes that have profoundly transformed families (e.g. fertility declines and rises in divorce). Unlike the West, which until recently largely conformed to norms concerning marriage and childbearing within marriage, Latin America has been characterized by high levels of consensual unions and childbearing outside of marriage.² Given the greater fluidity of consensual unions, rates of family disruption are relatively high, and there is greater heterogeneity in family patterns.³ Moreover, although information on consensual unions was not widely collected until the censuses in the 1950s, the little trend data there is shows a rise in the prevalence of these union types.⁴ An additional consequence of the more fluid and flexible consensual unions are rises in divorce (as in the West), contributing to the greater diversity in family life. To date, the complexity of elder's kin networks in Latin America, and the consequences for support in later life, have been largely unexplored.⁵

Moreover, research has called for cross-national comparisons as a means of enhancing our understanding of the underlying processes affecting the relationship between socio-demographic change and support in later life.⁶ Recent data collected in Costa Rica, Spain and England provide a unique opportunity to investigate the relationship between family structure (e.g. number and types of kin), union type, other key socio-demographic determinants (e.g. health) and support (i.e. coresidence, contact, and receipt of help) in later life from a comparative perspective.

Conceptual framework

Figure 1 provides a conceptual framework (adapted from Hermalin 2003) illustrating the interrelationships among major factors influencing support among older people. In this framework support encompasses: living arrangements, resource transfers, and caregiving. These outcomes are influenced by distal societal forces (e.g. demographic, cultural, etc.) that shape two sets of proximate determinants: a) personal and family characteristics and b) systems of social

¹ Institute of Gerontology, Melbourne House, Strand Campus, King's College London, London, WC2R 2LS, UK, Tel.: +44 (0)20 7848-3038, E-mail: <u>karen.glaser@kcl.ac.uk</u>

² Centro Centroamericano de Población, Universidad de Costa Rica, San José 2060, Costa Rica, Tel.: (506)207-5693., Email: <u>lrosero@ccp.ucr.ac.cr</u>

³ Dpto. Demografía, Instituto de Economía y Geografía, CSIC, Pinar 25, 28006 Madrid, España, Tel: (34) 91-4111098, Email: <u>dpuga@ieg.csic.es</u>

⁴ Department of Population and Family Health, Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, USA, Tel.: +1 410 955-4605, E-mail address: <u>eagree@jhsph.edu</u>.

⁵ Dpto. Demografía, Instituto de Economía y Geografía, CSIC, Pinar 25, 28006 Madrid, España, Tel: (34) 91-4111098 E-mail address: <u>tcastro@ieg.csic.es</u>

protection and other programmatic influences. We will focus on the influence of the personal and family characteristics of older persons on support in later life (denoted by the bold arrow in Fig 1) across the settings.

Background

A considerable body of evidence has examined the association between social support and wellbeing in later life.^{7 8} Fewer studies have investigated the relationship between family structure and support at older ages, though the availability of children has been shown to influence living arrangements and types of support provided (see Saad, in press for a review). However, critical to understanding the support system and the potential demand for services among older people is a clear picture of the number, types and location of kin.⁹

One of the difficulties in studies of support lies in its conceptualisation and operationalisation (see Barrera 1986, Hermalin 2002, and House 1988). Support is usually defined in terms of: (i) structural characteristics of the social support network; (ii) social embeddedness (e.g. the frequency of contact with others); (iii) emotional assistance (e.g. perceived support reflecting subjective evaluations of current and future availability, as well as adequacy, of support); and (iv) instrumental assistance (e.g. transfers of space, time and money).^{7 10 11} The networks that provide this support may include family, friends, neighbors, as well as public and private services.

Co-residence is an important source of support in both more and less developed regions.¹ ¹² Studies in the U.S. show that children who live at home provide greater assistance to parents (both financially and with household tasks) than non-co-resident children.¹³ In North America and Europe, 5-15% of older people live with their children¹⁴, a dramatic contrast to Latin America where over half of those aged 65 and over live with an adult child, and where there has been little change over time.¹ ¹⁵ Despite small changes, there is rising concern that changes in family behaviour (e.g. declines in fertility) will lead to increases in solitary living, thus reducing support for older people. However, a small number of studies have shown that reduced fertility is not necessarily associated with increases in solitary living among older people in either developed or developing countries.¹⁶¹⁷

Numerous studies have shown high levels of interaction across generations in the U.S. and Northern Europe, despite low levels of intergenerational co-residence.¹⁸ Nevertheless, reported contacts between older parents and children, are higher in Southern European countries, Latin America and Asia than in most of Europe and North America.¹⁹ However, only recently have studies investigating contacts with family members taken into account the availability of kin.

Evidence from U.S. and Europe shows little involvement in routine transfers between older parents and adult children.²⁰ However, Spain, like other Southern European countries shows higher levels of transfers (such as assistance received from family members) when compared to their Northern European counterparts. ¹⁹ The availability of public transfer programs (i.e. pension and health care) and the good health of the older population appear to ensure that they are able to meet their own needs. However, once older people experience ill health, family members are the main providers of support and care.²¹ In Latin America, with the exception of recent analyses based on the 2001 Pan American Health Organization (PAHO) surveys on Salud, Bienestar y Envejecimiento en América Latina y el Caribe (SABE), there has been little research on family support transfers among large representative samples of older people.^{12 22-24} Studies of the SABE data show high levels of intergenerational support, 85-93% of respondents receive some form of help.^{24 25}

Our study compares Costa Rica, Spain and England because they provide an opportunity to compare family support for older persons across cultures that have all experienced similar changes in family behaviour (e.g. fertility declines and rises in divorce) yet differ in terms of degree of familism and the prevalence of informal unions. In particular, we aim to examine whether in societies with a strong familistic culture (like Costa Rica and Spain) the older persons' health will show a weaker relationship with support in later life in comparison with a culture like England's, where relations between kin are primarily influenced by individualistic values and characteristics. We also seek to investigate whether the high levels of informal unions in Costa Rica modify the relationship between familism and family support, given the demographic opportunities for help.

Data

We compare newly available data from the 2005-2006 Costan Rican Estudio de Longevidad y Envejecimiento Saludable (CRELES), the 2005 Spanish Procesos de Vulnerabilidad en la Vejez (PVV), and the 2002-2003 English Longitudinal Study of Ageing. CRELES is based on a nationally representative sample of 3,000 people aged 60 and over, with oversampling for those at the oldest ages. The Spanish survey is based on a representative sample of 1,244 people aged 70-74 drawn from the metropolitan areas of Madrid and Barcelona. We will also explore using the Spanish Redes Familiares en Andalucía which includes data on frequency and intensity of contact, resource transfers and caregiving among non co-resident relatives. Finally, ELSA is based on a nationally representative sample of 12,000 people aged 50 and over (and their younger partners) in private households in England. The sample was drawn from the Health Survey for England in 1998, 1999 and 2001.

Methods

We will investigate older people's support using a variety of statistical techniques as appropriate to the outcome. Comparable support outcome measures are: (i) coresidence, (ii) contact with children, and (iii) help received with ADLS and/or IADLS. The determinants of coresidence among older people will be modeled using conditional multinomial logit models that account for the opportunity constraints imposed by kin availability (e.g. children). Following Saad⁴, separate models will be run for married and unmarried respondents. For coresidence the following are possible outcomes: spouse only (married persons) or alone (unmarried persons); with child; or with others. For those without children we impose a constraint to give a zero probability of co-residing or receiving assistance from children (see Tomassini et al., 2000 and Wolf 1994 for a detailed description of the method).^{26 27} In this case, for example, the dependent variable for living arrangement includes only the categories 'alone' and 'with others'. Analysis of contact with a child and help received will be modeled using logistic regression. Following Tomassini et al. 2004, frequency of contact will be measured as those reporting at least weekly contact from children. In analyses of help logistic models will be used to investigate the odds of receiving help with ADLS and/or IADLS.¹⁹

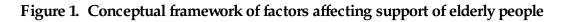
In addition to indicators of family structure (e.g. number and types of children) and union type (e.g. cohabiting) other covariates will include age, gender, education, social class and health. A key strength of the surveys used lies in the wealth of information collected on health status (e.g. self-perceived health; chronic conditions such as hypertension, arthritis, diabetes; depression; functional disability and cognitive function).

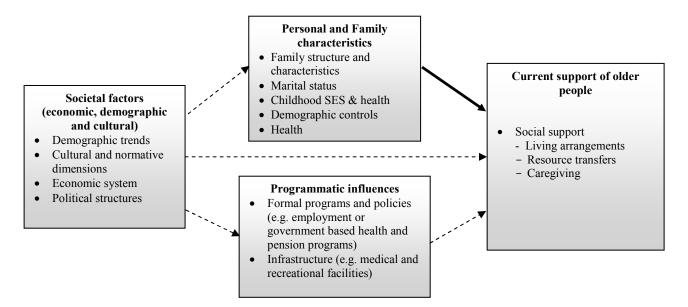
Preliminary Results

Table 1 shows the general characteristics of the samples, confirming wide variation across countries. For example, the percentage of the samples currently married is higher in Spain and England, and lower in Costa Rica, where the percentages cohabiting and divorced/separated are higher. On the other hand, as would be expected, a higher proportion of older persons report low education and belonging to the manual group in Costa Rica in comparison to their Spanish and English counterparts. In general, older people in England report fewer health problems.

Preliminary analyses also show variations in family structure (Table 2). The percentage of childless older people is similar in Spain and England (13 per cent) but higher than in Costa Rica (8 per cent). The mean number of living children in Costa Rica is around twice as high when compared with the figures for Spain and England (5.9 compared with 2.3), reflecting differences in the timing of the fertility transition across countries. The cohorts in this analysis would have been born in the 1940s or earlier and would have formed their families through the 1960s, a time of peak fertility in most of the Latin American countries.

Table 3 shows variations across the countries in the three types of support considered here: (i) living arrangements, (ii) contact with children, and (iii) receipt of help. As expected, the percentage of older people living alone in England is higher than that found in Costa Rica and Spain (33 compared with 23 and 10 per cent respectively). Coresidence with a spouse and children is more prevalent in Costa Rica, as one would expect, given the country's higher fertility levels which mean that young adult children are still at home. The level of weekly contact with children is similar in both Costa Rica and Spain (around 88 per cent) but higher than in England (51 per cent). Finally, receipt of help appears to be lower in Spain even though the Spanish sample comprises an older age group, a finding requiring further investigation.





DRAFT DO NOT CITE

Table 1 Sample Characteristics

	Costa Rica 60+	Spain 70- 74	England 60+
Marital Status			
Never-married	8.3	8.7	5.2
Married	50.8	64.1	51.8
Remarried (2 nd or later)	NA	NA	8.7
Cohabiting	8.5	1.6	1.5
Divorced/Separated	10.8	3.0	6.6
Widowed	21.6	22.7	26.2
Education			
Low education (<6 years)	63.0	31.1	38.9
Social Class			
Manual	72.0	51.8	46.9
Area of residence			
Urban	60.6	100.0	NA
Health			
Self perceived poor health	49.5	45.1	35.1
Chronic health problems	31.1	27.6	32.0
Functional limitations	40.4	17.4	22.9
Depression	15.5	20.7	26.0
IADL	23.1	25.9	14.4
ADL	34.0	8.1	18.5
Cognitive	10.0	4.9	4.7
Base sample size	2474	1244	6957

	Costa Rica 60+	Spain 70- 74	England 60+
% Childless	7.5	13.0	13.2
Mean number of living children	5.9	2.25	2.27
(Range)	0-24	(0-10)	(0-13)
% with adopted children	4.9	NA	2.8
% with step children		NA	6.6
% with grandchildren	87.9	76.0	75.7
Base sample size	2490	1244	6957

Table 2: Fertility and Children's Characteristics: Costa Rica, Spain and England

Table 3: Support among older people: Costa Rica, Spain and England

	Costa Rica 60+	Spain 70- 74	England 60+
Coresidence			
Alone	10.2	23.4	32.7
With spouse only	18.5	41.6	53.4
With spouse and others (including children)	40.1	20.7	7.7
With children, no spouse	21.8	9.0	4.1
With others (but no children or spouse)	9.3	5.2	2.0
Contact with children			
Weekly	86.6	88.6	51.4
Monthly	1.9	5.4	13.2
None (includes infrequent contact)	11.5	4.8	35.5
Receipt of help (ADL/ IADL)	31.3	22.3	29.2
Base sample size	2490	1244	6957

References

- 1. Palloni A. Living arrangements of older persons. In: Nations U, editor. *Living arrangements of older persons: Critical issues and policy responses. Population Bulletin of the United Nations, Special Issue Nos.* 42/43. New York: United Nations, 2001:54-110.
- Castro-Martin T. Matrimonios sin papeles en Centroamerica: persistencia de un sistema dual de nupcialidad. In: Rosero Bixby L, editor. *Población del Istmo 2000: Familia, migración, violencia y medio ambiente*. San Jose, Costa Rica: Oficina de Publicaciones de la Universidade de Costa Rica, 2001:41-66.
- 3. Goldman N. Dissolution of First Unions in Colombia, Panama and Peru. *Demography* 1981;18(4):659-679.
- 4. Glaser K. Determinants and fertility consequences of consensual unions in Costa Rica (unpublished dissertation). University of Michigan, 1994.
- 5. Saad PM. Support transfers between the elderly and the family in southeast and northeast Brazil. Submitted to the Graduate School of The University of Texas, 1998.
- 6. National Research Council. *Preparing for an Aging World: The case for cross-national research*. Washington, D.C.: National Academy Press, 2001.
- 7. House JS, Landis KR, Umberson D. Social relationships and health. *Science* 1988;241(4865):540-5.
- 8. Bowling A, Grundy E. The association between social networks and mortality in later life. *Reviews in Clinical Gerontology* 1998;8:353-361.
- Hermalin AI, Ofstedal MB, Chi L. Kin availability of the elderly in Taiwan: Who is available and where are they? Ann Arbor, Michigan: Population Studies Center. University of Michigan., 1992.
- 10. Barrera M. Distinctions between social support concepts, measures, and models. *American Journal of Community Psychology* 1986;14(4):413-445.
- 11. Hermalin AI. Theoretical perspectives, measurement issues, and related research. In: Hermalin AI, editor. *The well-being of the elderly in Asia*. Ann Arbor: University of Michigan Press, 2002.
- 12. Saad PM. Living arrangements and informal support transfers. In: Nations U, editor. *Living arrangements of older persons around the world*. New York: United Nations, in press.
- 13. Hoyert DL. Financial and household exchanges between generations. *Research on Aging* 1991;13(2):205-25.
- 14. Sundström G. Care by families: An overview of trends. In: OECD, editor. *Caring for frail elderly people. New directions in care.* Paris: OECD Social Policy Studies, 1994:15-55.
- 15. Bongaarts J, Zimmer Z. Living arrangements of older adults in the developing world: An analysis of Demographic and Health Survey Household Surveys. *Journal of Gerontology: Social Sciences* 2002;57B(3):S145-S157.
- 16. Tomassini C, Wolf DA. Shrinking kin networks in Italy due to sustained low fertility. *European Journal of Population Studies* 2000;16:353-372.
- Knodel J, Chayovan N, Siriboon S. The impact of fertility decline on familial support for the elderly: an illustration from Thailand. *Population and Development Review* 1992;18(1):79-103.

- Tomassini C, Glaser K, Wolf DA, Broese van Groenou MI, Grundy E. Living arrangements among older people: an overview of trends in Europe and the USA. *Population Trends* 2004;115:24-34.
- 19. Tomassini C, Kalogirou S, Grundy E, Fokkema T, Martikainen P, Broese van Groenou MI, et al. Contacts between elderly parents and their children in four European countries: current patterns and future prospects. *European Journal of Ageing* 2004;1:54-63.
- 20. Eggebeen DJ. Family structure and intergenerational exchanges. *Research on Aging* 1992;14(4):427-447.
- 21. Soldo BJ, Hill M. Family structure and transfer measures in the Health and Retirement Survey. *The Journal of Human Resources* 1995;XXX:S108-S137.
- 22. De Vos S, Solís P, Montes de Oca V. Receipt of assistance and extended family residence among elderly men in Mexico. *International Journal of Aging and Human Development* 2004;58(1):1-27.
- 23. Pelaez M, Martinez I. Equity and systems of intergenerational transfers in Latin America and the Caribbean. *Revista Panamericana de Salud Pública/ Pan American Journal of Public Health* 2002;11(5-6):439-443.
- 24. Saad PM. Transferencias informales de apoyo de los adultos mayores en América Latina y el Caribe: Estudio comparativo de encuestas SABE. *Notas de Población, CELADE, Chile* 2003;30(175-218).
- 25. Glaser K, Agree EM, Costenbader E, Camargo A, Trench B, Natividad J, et al. Fertility decline, family structure, and support for older persons in Latin America and Asia. *Journal of Aging and Health* 2006;18(2):259-291.
- 26. Tomassini C, Wolf D. Stability and change in the living arrangements of older Italian women: 1990-1995. *Genus* 2000;LVI(1-2):203-219.
- Wolf DA. The elderly and their kin: Patterns of availability and access. In: Martin LG, Preston SH, editors. *Demography of aging*. Washington DC: Academy Press, 1994:146-194.