Building systems to address functional decline and dependence in ageing populations

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Long-term care in low and middle income countries

Peter Lloyd-Sherlock

University of East Anglia

Background paper

Introduction.

Despite the high and rapidly increasing level of demand for long-term care (LTC) in low and middle income countries (LMICs), this issue continues to be neglected both nationally and at the international level. Current policy paradigms are usually modelled on western approaches and are often unsuited to diverse national settings. In the absence of genuine policy engagement, the financing and provision of LTC services continues to be left to families and, increasingly, a largely unregulated private sector. The challenges of developing optimal forms of provision that combine meaningful state intervention with the participation of other sectors, and protect care-dependent people from the risks of abuse, impoverishment and premature mortality are daunting.

This paper sets out current knowledge about LTC for older people in low and middle income countries (LMICs), such as it exists, and identifies key policy issues. The paper begins by assessing the scale of demand and the extent to which this is reflected in national and international policy agendas. The paper goes on to review available information about different modalities of LTC provision, including home care, community care and institutional arrangements. Given the limited extent of current knowledge, the paper does not provide models of best practice for LTC provision on low or middle income country settings. Rather, it sets out a number of specific priorities for both researchers and policy-makers.

Scoping the demand for LTC in LMICs.

The only published global forecast estimates that the number of care-dependent older people will quadruple by 2050 (WHO, 2002), but precise data on long-term care needs are not available for most LMICs. It is therefore necessary to rely on indirect indicators of demand, such as population ageing and survey data on disability and functional status.

Taken as a whole, LMICs already contain the majority of the global population aged 65 and over (62 per cent in 2010). Whether this translates directly into an equivalent level of demand for LTC is difficult to gauge, since relationships between chronological age and functional status appear to be quite elastic. Table 1 summarises data from the WHO SAGE survey of older adults' health and reveals large national variations in levels of reported disability for people aged 70 and over. For example, the proportion reporting difficulties with mobility ranged from 40 per cent in China to 86 per cent in

the Russian Federation. These findings are broadly in line with comparative studies of high income countries, which also report large national variations (Lafortune et al, 2007).

Table 1. Disabilities for population aged 70 or over, 2007-10 (% of total population).

	Any disability (%)	Difficulty moving around (%)	Difficulty with self care (%)	Difficulty with cognition (%)
China	85.4	40.4	19.7	68.0
Ghana	88.1	63.4	35.8	74.3
India	97.3	72.5	36.3	80.7
Mexico	79.7	54.3	31.3	54.6
Russia	98.1	85.6	56.4	74.7
South Africa	86.0	51.7	24.8	67.6

Source: He et al (2012).

WHO SAGE data suggest that the link between population ageing and demand for LTC will be quite variable across developing countries. The overall health status of populations in LMICs tends to be worse than in high income countries. This may mean that only relatively healthy people survive into old age, which would reduce age-specific LTC demand. Alternatively, an accumulation of poor health and risk factors through the life course may mean that less healthy populations are more likely to contain less healthy older people. There is some evidence for this second effect: in 2000/5 life expectancy at age 65 was 14.2 years in less developed regions, compared to 17.1 in more developed ones (UN DESA, 2002).

Three general messages emerge from this section. First, there is an urgent need to understand why older populations in some LMICs appear to have much lower levels of disability than other ones. This may provide policy insights which can mitigate levels of future demand. Secondly, data on population ageing should not be used in isolation to estimate LTC demand. Thirdly, in the absence of more robust data, it appears that age-specific demand for LTC in developing countries is at least as high, if not substantially greater, than in the developed world. Moreover, a combination of rapid ageing and increased prevalence of chronic conditions means that overall demand is set to rise sharply over the next decades (WHO, 2010a).

National and international responses to growing LTC demand in LMICs.

Despite the level of demand, LTC issues receive little attention, either from national governments in LMICs or from international agencies. In the late 1990s the World Health Organisation established a global programme of LTC research, which generated a number of outputs, but this was discontinued after 2002 and is only now being reinstated (WHO, 2002; Brodsky, Habib and Hirschfeld, 2003a; Brodsky, Habib and Hirschfeld, 2003b). OECD has an on-going programme on the financing and quality of LTC, but this is primarily focussed on high income countries (OECD, 2011; Lafortune et al, 2007; OECD, 2005). Among international development agencies, concerns about income poverty and development finance have led to a strong focus on the provision of pensions and social protection (Lloyd-Sherlock, 2010). By contrast, international development agencies have almost nothing to say about LTC issues and have paid more attention to the role of older people as carers for other family members with HIV/AIDS than to care for older people themselves (ICRC, 2005). At the national level, responsibility for LTC often falls between different line ministries or is delegated to local government, thus reducing its profile and policy priority (Phillips & Chan, 2002).

The limited attention paid to LTC by policy-makers is mirrored by a lack of relevant academic research. Based on a systematic review of published research abstracted in Pubmed and other relevant journals, Table 2 shows the disparity between the demand for LTC and scientific research.[1] For example, Africa and Latin America combined accounted for 14.6% of the global population aged 65+, but less than one per cent of published outputs. To some extent, this neglect is part of a wider bias against research on older people in LMICs, reflecting a failure for agendas to respond to rapidly changing demographic scenarios (Shetty, 2012).

A combination of limited policy engagement and research neglect has permitted the continuation of complacent views about LTC in LMICs. Policy-makers are not always aware of the speed at which population ageing is progressing and the multiple challenges this generates. Also, there is a pervasive view that in LMICs families are better placed to provide care than is the case in high income countries, and that there is therefore less need for policy interventions. One reason put forward to support this view is that older people in most LMICs are less likely to live alone than is the case in high income countries (UN DESA, 2007). Living arrangements are considered relevant to LTC, since it is widely assumed that co-residence with children is associated with material and non-material forms of family support (United Nations Population Division, 2005). The implication is that providing these needs can be left to family members and that there is no need for the state or other agencies to become involved in LTC. Indeed, the argument has been made that state provision of

[1] For the full study see Lloyd-Sherlock (2013).

such services should be limited, since it may crowd out family support, by letting older people's relatives "off the hook" (Costa-Font, 2010). At the same time, policy-makers in LMICs may be aware of the mounting concerns about the fiscal burden of LTC provision in developed countries and may be reluctant to frame the issue as a matter for state intervention.

Table 2. Share of global older population and published LTC research, by region and selected countries.

	Share of global population aged 65+ 2010 (%)	Share of relevant PubMed and other gerontology studies (%)
More developed regions*	37.5	93.9
Less developed regions	62.4	6.1
LMICs in less developed regions**	60.5	2.6
Africa	6.9	0.4
Asia	53.3	8.2
Europe	22.8	22.5
Northern America	8.6	70.0
Latin America and the Caribbean	7.7	0.4
Australia and New Zealand	0.7	3.1
East Asia	28.6	7.2

*Europe, Northern America, Australia/New Zealand and Japan
**This excludes the following high income countries that are located in less developed regions: South Korea, Singapore, Taiwan, Hong Kong, Saudi Arabia and Kuwait.

The limited extent of government intervention in LTC provision can be seen in the Indian state of Uttar Pradesh, which contains more than 8 million people aged 60 or over. The government's Department of Social Welfare had established a LTC programme in 1971. In 2009 this programme consisted of two single-sex residential homes, with a combined capacity of no more than 100 people. In practice, the number of residents was considerably lower, in part because large sections of the

original buildings were no longer deemed habitable. The main purpose of these homes was to provide shelter for "destitute" older people who had no other means of material support. Older people with chronic health conditions or functional limitations were not permitted admission.[2]

The grounds for leaving LTCs entirely to the family look increasingly dubious. Many LMICs are experiencing economic and social transformation at a much faster rate than historically occurred in high income countries. Reduced fertility, increased population mobility and higher rates of female participation in salaried work are disrupting the living arrangements and potential supply of family carers for older people (Redondo & Lloyd-Sherlock, 2010). In China, for example, the proportion of older people living with children fell from 73 to 57 per cent between 1982 and 2005 (Herd et al, 2010). In the poorest countries, conflict, natural hazards and economic shocks puts families under particular strain. There is a need to assess the extent to which family support is holding up under these conditions, and the limited evidence does not permit generalisation (Aboderin, 2004; Knodel et al, 2007).

It is sometimes claimed that norms of family support for older people are stronger in LMICs and that residential care is more stigmatised (Brijnath, 2012). Again, the evidence for this general view is not robust. There are indications that social attitudes towards family care-giving are changing, and that formal LTC provision is becoming more acceptable (Jamuna, 2003; Sinunu et al, 2009). Some studies refer to increasing numbers of disagreements between family members about the provision of care for older members, and some countries have seen a rise in the number of associated legal disputes (Cheung Wong and Leung, 2012).

The limitations on what families are either willing or able to provide and the reluctance of many governments to develop meaningful interventions leaves a large gap in the current provision of LTC. In some countries, this gap may be filled to a limited degree by NGOs, religious organisations or community-level initiatives. Organisations such as NGOs have not historically focussed on LTC, and the sector as a whole remains heavily focussed on other issues (Lewis and Opoku-Mensah, 2006). There is evidence that private sector interventions are doing more to fill the gaps left by state and family. This has included a proliferation of "luxury" residential services in many middle income countries.[3] It has also includes large numbers irregular care homes for the "lower end" of the market. The few available studies on private residential services in LMICs report that these are typically small scale and unregulated, raising concerns about the quality of provision [Redondo & Lloyd-Sherlock, 2010; Gutiérrez-Robledo et al, 1996; Sinunu et al, 2009). At the same time, there is

[2] Notes from personal visit made by the author.
[3] There has been no published research on the number of such providers, but many advertise on the internet. Using suitable search terms generates large numbers of hits for most middle income countries.

evidence from several countries of families making increasing use of informal paid carers, who typically lack specialised training and are unregulated (Prince et al, 2012).

Three general messages emerge from this section. First, there is evident neglect of LTC in LMICs among national and international policy-makers, and an associated absence of published research. Second, assumptions that families are willing and able to meet the bulk of LTC needs in these countries are called into question by the available evidence. Third, a general absence of state intervention in LTC has created a gap which has been mainly filled by the private sector, on a largely unregulated basis. For many older people in LMICs, it is likely that the limitations of current LTC provision mean that their care needs go largely or completely unmet.

Modalities of LTC delivery in resource-poor settings.

The range of possible policies and interventions to support long-term care for groups such as older people is very broad. Some of the approaches most commonly adopted in developed countries are summarised in Table 3. Rather than an "all or nothing" distinction between family care and full residential institutionalisation, it is more helpful to think in terms of a spectrum or mix of alternatives. In most LMICs the extent and range of government and privates sector involvement in most of the interventions listed in Table 3 is very limited (Brodsky et al. 2003b; Phillips and Chen 2002). Also, as will be seen, the available data tend to lack precision about the type of service being provided. For example, they rarely distinguish between institutional providers that operate as nursing homes and ones that provide more limited residential care. Consequently, this section breaks services down into three broad categories: home-based care, residential care and services provided at the community level.

Table 3. Long-term care options for older people.

Intensive institutional care	Long-term hospitalisation
	Nursing homes
Less intensive institutional care	Residential homes
	Short stay or respite care
	Sheltered housing
Community services	Day centres
	Nurse visits
Home care	Home help
	Cash benefits for carers
	Support groups for carers

Home-based care.

Even more than in high income countries, home based care accounts for the lion's share of service provision in LMICs. Table 4 summarises findings on household care-giving arrangements for a diverse set of LMICs taken from the 10/66 Dementia Research Group. Predictably, the data show that female relatives play a disproportionate role as carers. A significant proportion of these women, particularly in rural settings, had been forced to cut back on paid work in order to meet these care obligations. This raises the issue of employer attitudes towards granting workers leave to deal with family care requirements, including acute care emergencies. A survey of old age care attitudes in Uruguay shows that employers were more prepared to allow female staff to work part-time or have periods of unpaid leave to meet care requirements than they were for male staff (Batthyany et al, 2012).

Table 4: Care givers and care arrangements for care dependent older people in selected developing countries.

	Peru Urban N=135	Peru Rural N=26	Mexico Urban N=114	Mexico Rural N=82	China Urban N=183	China Rural N=54	Nigeria N=228
Carer characteristics							
Spouse	18.5%	26.9%	16.7%	15.9%	38.8%	38.9%	13.7%
Child or child-in-law	40.0%	50.0%	73.7%	65.8%	43.2%	59.3%	68.0%
Non-relative	25.2%	3.8%	3.6%	0.0%	16.4%	1.9%	1.4%
Female carer	85.9%	88.5%	83.3%	81.7%	67.2%	50.0%	63.2%
Care arrangements							
Carer has cut back on work to care	16.3%	23.1%	25.4%	36.6%	3.8%	48.1%	39.2%
Additional informal carer or carers	45.9%	57.7%	55.3%	58.5%	7.1%	22.2%	66.5%
Paid carer	33.3%	7.7%	3.5%	1.2%	45.4%	1.9%	2.1%

Source: Prince et al (2012).

In the face of growing LTC demand and rapid social change, many LMIC governments have taken steps to ensure that family members continue to provide support. These steps typically include legal frameworks requiring family members to care for dependent older people and LTC policy statements emphasise the primacy of this form of support. For example, according to China's Ministry of Civil Affairs in 2010:

> "home care is the foundation, community care provides the necessary support, and residential care is supplementary" (cited in Cheung Wong and Leung, 2012:578).

China has done more than most middle income countries to provide services to support home care, and the city of Shanghai stands out as an exceptional case that has developed an extensive set of home-care support services. Shanghai's municipal government provides financial support to 60 per cent of older people receiving home care, representing 6 per cent of the city's older population (Cheung Wong and Leung, 2012). It has also pioneered the provision of 44,000 "at home hospital beds" for older people, which is primarily funded by the local government, with a small additional user fee. The experience of Shanghai is not, however, representative of China as a whole. It has been estimated that the provision of services to support home care in urban China only satisfy 16 per cent of expressed need, and there are no specific government targets for the future expansion of services (Cheung Wong and Leung, 2012). The financing of home care is the responsibility of local government and it varies geographically, with better resourced local governments providing more.

Many parts of China and many other LMICs lack the resources to develop a range of services to compare with those on offer in Shanghai. There is evidence of the potential for less resource

intensive approaches to support home care by enhancing family members' caregiving skills and providing them with emotional support. For example, In India the establishment of teams of home care advisers who provided these forms of assistance to carers of people with dementia led to significant improvements in carers' mental health status. There was a more general association with a reduced risk of death for the older person with dementia (Dias et al, 2008). Similar low cost interventions have been developed by a range of non-governmental organisations, including HelpAge International and Easy-care.[4]

In some countries, the main form of state support for older people, care dependent or not, is through old age pensions. It is sometimes claimed that these pensions may enhance the status of older people within their households and, potentially, act as an inducement for relatives to provide support when needed (Schwartzer, H. and A. Querino (2002). There is, however, little if any evidence to support these claims and therefore pensions should not be considered as an alternative for other forms of support for home-care (Lloyd-Sherlock, 2006a).

Residential care services.

The limited role of most LMIC governments in LTC is mainly through the direct provision of residential care services. As seen in the case of Uttar Pradesh above, this often involves a tokenistic number of care homes, meeting a negligible proportion of actual need. For example, Fon Sim (2002) reported that in 1999 the government of Malaysia ran just two homes with a total capacity of 150 residents. Similarly, it was reported in 2006 that state care homes in the city of Lagos, Nigeria (which has a population of over 20 million) had a total capacity of just 37 places (Seniors World Chronicle, 2006). Consequently, the bulk of residential provision in most LMICs comes from the private or charitable sectors.

Despite the rapid increase in the number of private providers, systematic information about their numbers of the services they provide is very limited. This reflects an almost complete absence of regulation of the sector. Limited information about residential institutions is only available for a small number of middle income countries, including Brazil for 2008 and China for 2009 (Camarano et al, 2010; Cheung Wong and Leung, 2012). The Brazil survey identified a total of 3,548 institutions, accounting for less than one per cent of Brazilians aged 65 and over. Approximately 65 per cent of

[4] See http://www.easycare.org.uk/ and http://www.helpage.org/what-we-do/what-we-do/health/health-policy/

institutions were charitable, 28% were run on a for-profit basis and only 7% were either wholly or partly state-run.

The China survey identified 38,060 residential facilities, containing 2,110,000 residents, representing 1.5% of the total older population. In China the majority of institutions were financed and managed by local governments. The large presence of the Chinese state as a direct provider of residential LTC services is an exceptional case among LMICs, reflecting the unique nature of the Chinese state and national development model. NGOs and charities have a limited presence in China and played a much smaller role than in Brazil. Over recent years China has seen a sharp increase in the number of beds in residential homes, rising by 53 per cent between 2006 and 2009. This has entailed a large increase in state funding and it is clear that residential care attracts the lion's share of the Chinese government's investment in LTC.

Neither the Brazil nor the Chinese surveys were able to provide a categorisation of institutions, in terms of whether they simply provided accommodation or offered a wider set of services. In the case of China, this is due to a lack of formal classification of residential care services (Cheung Wong and Leung, 2012). More generally, it is reported that state-run homes in China are generally better-resourced and offer better services than private ones, which:

"are usually small and hostel-like; informally organised; and coping with a shortage of financial manpower, and professional resources" (Cheung Wong and Leung, 2012:580).

In Brazil the majority of institutions were small, containing 20 or fewer residents. The range of services aimed at enhancing residents' health and functional status was generally limited. Only 31 per cent offered any form of occupational therapy and less than 60% offered any physiotherapy. Psychological services were offered in around 15% of homes. In both Brazil and China there is evidence that monitoring and quality control of residential care homes was very limited. Cheung Wong and Leung (2012) refer to China's government standards and regulations as a "wish list". A separate survey of LTC institutions in Mexico City found that a lack of effective supervision and norms was a key factor in poor service quality, especially in the private for-profit sector (Gutiérrez-Robledo et al, 1996). Similarly, a survey of 100 care homes in Buenos Aires reported uneven levels of quality and that older people in good mental health often had no say in the decision to be admitted (Redondo and Lloyd-Sherlock, 2010).

As in Uttar Pradesh, there is a tendency for state care homes to target "destitute" older people who lack independent means and family support, rather than those with specific care needs. In both Argentina and China the few state-run homes do not permit admission to older people with serious

functional impairments or health problems on the grounds that these are more expensive and difficult to manage (Redondo and Lloyd-Sherlock, 2010; Cheung Wong and Leung, 2012).

The quality of services in residential institutions depends on a supply of well-trained staff. In the case of China, it is estimated that at least 10 million workers with specialist training are currently needed (Cheung Wong and Leung, 2012). Reflecting this shortage, the government of Shanghai used large numbers of temporarily unemployed workers to staff community-based cooperatives for older people. Existing training programmes are only able to supply a very small proportion of what is needed and low wages for care workers reduce both the quantity and quality of the workforce. Similar issues affect Brazil, where a strong economic performance and low unemployment means that care work competes with better-remunerated jobs in other sectors. In Argentina, the Ministry of Social Development set up a home care training programme in 1996, which has provided around 400 hours of training to 25,000 paid carers.

In both Brazil and China, state LTC services are provided through local governments, which have a large element of discretion about the form these services take and the amount of funding they receive. This limits the availability of data at the national level, and encourages an uneven, uncoordinated approach. There is evidence that better-resourced local governments, such as the city of Shanghai, invest considerably larger amounts in LTC than do poorer ones. In Brazil, local governments are also responsible for regulating non-state providers such as religious entities.

The Brazil and China surveys raise questions about both the quantity and quality of institutional care services for older people. In fact, these surveys may substantially underestimate the real number of care homes since many may operate informally and may not be included in local government lists of service providers. For example, it has been estimated that 40% of institutions in Buenos Aires city, Argentina were not officially registered and were therefore not subject to any forms of regulation (Cronenbold 2007). It is unlikely that the services provided by these informal, illegal providers are at the same standard as in the regulated sector, and there are numerous media reports of abuse and neglect (Redondo and Lloyd-Sherlock, 2010).[5]

In developed countries practices of institutional care for all groups, be they older people or people with impairments, were traditionally shaped by strategies of containment and control (Donzelot 1979; Castel 2004). From the 1970s powerful critiques led to new rights-based approaches to long-term care and these have become the accepted norm in most developed countries (Kagan and

[5] In 2010 a combined effort by the Buenos Aires provincial Ministries of Health and Social Development led to the registration of 130 previously illegal care homes, of which a third were required to make substantial building alterations (Ciudadano Diario, 2010).

Burton 2004; Wilson 2000). The extent to which these norms have been put into practice is, however, quite variable, and care homes continue to be widely perceived as: “alienating places where older people go to die” (Davies and Nolan 2003:431). Two key constraining factors have been the high cost of long-term care and the capacity of governments to regulate providers effectively (OECD 2005). In LMICs, where resources and state regulatory capacities are more limited, there is little information about the extent to which services follow more traditional and repressive approaches or more “enlightened” models. The limited evidence suggests that the former is much more prevalent.

Care provided at the community level

Community-level care services typically include day centres, as well as local organisations engaged in activities of relevance to older people. Such activities can offer support and respite to home-carers, as well as enhancing older people’s social networks, health promotion and providing advice on the availability of other services. In many LMICs, these activities are mainly provided on an ad hoc basis by local NGOs, charities and grassroots associations. Consequently, information about the numbers of these associations and the range of their activities is very limited.

In a small number of middle income countries national and local governments have taken an increased interest in supporting community-level services. This is most apparent in China, which implemented a national Star Light Project in 2001. It is claimed that 32,490 new old age community centres were built during the first three years of this initiative. Additionally, China has a network of 175,000 general community centres which provide some services specifically concerned with older people. However, as with home care services, community service provision is reported to be uneven and heavily concentrated in better resourced locations (Cheung Wong and Leung, 2012).

In the 1980s and early 1990s Argentina’s health insurance fund for pensioners, PAMI, established a large network of pensioner community centres, numbering over 300 in Buenos Aires alone. These centres offered a wide range of services including health promotion, continuing education and recreation. PAMI also offered a generous scheme of financial support for family carers. In the mid-1990s PAMI experienced a major financial crisis, in part brought on by these ambitious projects, and funding for community services was largely ended (Lloyd-Sherlock, 1997). Many of the centres disappeared, although some survived in a more limited form, supported by local NGOs and community associations. Over the past decade, as PAMI’s financial situation improved, the national network of pensioner centres re-emerged.

Discussion and conclusions.

This paper assesses current knowledge on long-term care for older people in low and middle income countries. Despite the scale of LTC demand, current knowledge is extremely limited, and this is reflected in the gaps and limitations of this review. Responding to the challenge of LTC requires difficult decisions and trade-offs about the role of state and society, the status of women and, in particular, the rights and entitlements of frail older people. These decisions should be scientifically informed, legally robust and ethically coherent. In most LMICs public debate about LTC has yet to begin. As such, this paper's main recommendation is for a concerted effort to raise the profile of LTC issues in LMICs through networking with key stakeholders, wider public engagement and additional research.

Studies of high income countries show that the scale, form and quality of LTC provision countries is very variable, suggesting that there is considerable scope to share and learn from different national experiences (OECD, 2011; World Bank, 2007). The limited available information suggests a similar, if not greater, degree of diversity across LMICs, although some general trends are apparent. Across LMICs, the lion's share of LTC is provided by family members with little support from outside the home. State residential care provision is often minimal and tends to focus on "destitute" older people. The increasing social acceptability of residential care has led to the rapid growth of a largely unregulated private care home industry. Community-level provision is available in some settings, but is usually provided by NGOs or local governments on an ad hoc basis. For all these modalities of LTC, a critical issue is whether provision acknowledges the rights and enhances the functional status of older people, or whether it increases their potential exposure to abuse and accelerates their functional decline. The currently available data sheds little light on this issue, but suggests that the overall quality of provision leaves much to be desired.

Another key issue is the extent to which LTC provision is integrated with other services for older people, particularly health services. The available evidence suggests that this integration is very limited. For example, in most LMICs there separate national and local government departments for health and LTC services. In some cases, hospitals are default providers of geriatric care services through bed blocking and "social hospitalisation" (Cheung Wong and Leung, 2012; Thamprechavai et al, 1992). This may reflect the cultural stigma of placing an older relative in residential care or the limited availability of places. Reducing these practices through more effective LTC provision could represent a substantial cost saving for many governments. More generally, there is a need to include

LTC for older people as part of wider reorientation of health services away from curative hospital provision towards a model of age-friendly primary health care (Moon, 2002). There may also be scope to develop closer links between LTC and palliative health services, which also tend to be very neglected in most LMICs (Lamas and Rosenbaum, 2012).

In most LMICs, governments lack the fiscal resources and political will to play a leading role in the direct provision of LTC services. In these cases, it is critical to develop effective and sustainable models of regulation, particularly for the burgeoning private sector. Experiences from other sectors indicate the challenge and complexity of state regulation in settings of limited resources and weak institutions (World Bank, 2002; WHO, 2010b). Regulation should include the accreditation and vetting of LTC workers to enhance quality and minimise the exposure of older people to abuse. As in high income countries, regulation must strike a balance between achieving acceptable norms and standards and imposing large additional costs on providers which may drive them either out of business or underground.

In high income countries, discussions about LTC are heavily focussed on financing issues and there is particular interest in the potential of social insurance schemes to supplement other forms of funding (OECD, 2005). The scope to develop comparable interventions in most LMICs is quite limited. First, the experiences of many countries in running large contributory insurance schemes for pensions and health services have been at best mixed (Lloyd-Sherlock, 2006b). In many cases, schemes have generated large financial deficits and required substantial bale-outs from general revenue. Levels of evasion tend to be high, reflecting low levels of public trust in such systems. If it is difficult to persuade people to contribute to an insurance fund that offers guaranteed and tangible future benefits, such as retirement pensions, the prospects that they will be prepared to make lifetime contributions towards potential LTC needs are remote.

In the short to medium-term, the focus of state provision in most LMICs should be in regulating other providers, rather than extending residential services for the destitute or the developing social insurance schemes comparable to Japan's . This, in combination with primary health care interventions to support home carers, offers the most effective low cost model of state intervention. Whilst not seeming ambitious, the costs of this simple model should not be underestimated. In the absence of large scale insurance programmes, this is likely to be met by general government revenue. This raises the issue of how state financing of LTC can be facilitated in the face of many other competing demands and limited resources. Raising the public profile and public debate about LTC may contribute to shifting policy-maker priorities. To some extent, there is also an economic case to be made. In both high income and LMICs there is a general perception that LTC provision is

an entirely "sunk cost" (OECD, 2005). In fact, appropriate LTC interventions can substantially contribute to supporting function in later life, and can prevent unnecessary expenditure on mainstream health services or on avoidable institutionalisation, as well as the indirect costs of reduced economic and social participation.

References.

Aboderin, I. (2004) “Intergenerational family support and old age economic security in Ghana” in Lloyd-Sherlock, P. ed. *Living longer. Ageing, development and social protection*. Zed, London.

Batthyany, K., Genta, N. and Perrotta, V. (2012) La población uruguaya y el cuidado: persistencias de un mandato de género” CEPAL, Serie Mujer y Desarrollo 117, Santiago de Chile.

Brijnath,B. (2012) “Why does institutionalised care not appeal to Indian families? Legislative and social answers from urban India” *Ageing and Society* 32(4):697-717.

Brodsky, J.,Habib, J. and Hirschfeld, M. (2003a) “Key policy issues in long-term care” World Health Organisation, Geneva.

Brodsky, J.,Habib, J. and Hirschfeld, M (2003b) “Long-term care in developing countries: ten case studies” Geneva, World Health Organisation.

Camarano, A., Kanos, S. Leitão e Mello, J., and Fernandes Carvalho, D. (2010) “As instituições de longa permanência para idosos: abrigo ou retiro?” in A.Camarano, ed. Cuidados de longa duração para a população idosa: um novo risco a ser assumido?. IPEA, Rio de Janeiro.

Castel, R. (2004) *Las metamorfosis de la cuestión social*. Buenos Aires. Paidós.

Cheung Wong, Y. and Leung, J. (2012) “Long-term care in China: issues and prospects” *Journal of Gerontological Social Work* 55(7):570-86.

Ciudadano Diario (2010) “Salud inspecciona geriátricos ilegales y busca regularizar 130” http://www.globalaging.org/health/world/2010/salud.htm

J.Costa-Font (2010) “Family ties and the crowding out of long-term care insurance” *Oxford Review of Economic Policy* 26(4):691-712.

Cronenbold, A. (2007). Calculan que hay 400 geriátricos ilegales *La Nación*, Buenos Aires, 22 August 2007.

Donzelot, J. (1979) *La policía de las familias*. Valencia. Spain. Pretexts.

Davies, S. and Nolan, M. (2003) “ ‘Making the best of things’: relatives’ experiences of decisions about care-home entry” *Ageing and Society* 23(4): 429-450.

Dias A, Dewey ME, D'Souza J, Dhume R, Motghare DD, Shaji KS, Menon R, Prince M, Patel V. (2008) The effectiveness of a home care program for supporting caregivers of persons with dementia in developing countries: a randomised controlled trial from Goa, India. *PLoS One* 3(6):e2333

Fon Sim, O. (2002) “Malaysia: national policies on ageing” in D.Phillips and C.Chan eds Ageing and long-term care. National policies in the Asia-Pacific IDRC/Institute of Southeast Asian Studies, Ottawa/Singapore.

Gutiérrez-Robledo L., Reyes-Ortega G, Rocabado-Quevedo F, López-Franchini J. (1996) "Evaluacíon de instituciones de cuidados prolongados para ancianos en el Distrito Federal. Una visión crítica" *Salud Pública de México* 38(6):487-500.

He, W., Muencrath, M. and Kowal, P. (2012) Shades of gray: a cross-country study of health and wellbeing of older populations in SAGE countries, 2007-2010. United States Census Bureau, Washington DC.

Herd, R., Hu, Y. and Koen, V. (2010) "Providing greater old age security in China" Economics Department Working Paper 751, OECD, Paris.

International Committee of the Red Cross (ICRC) (2005) "HIV/AIDS in southern Africa takes toll on grandparents caring for orphans" http://www.ifrc.org/fr/nouvelles/nouvelles/africa/south-africa/hivaids-in-southern-africa-takes-toll-on-grandparents-caring-for-orphans/

Jamuna, D. (2003) "Issues of elder care and elder abuse in the Indian context" in Liebig, P. and Irudaya Rajan, S., eds. *An aging India. Perspectives, prospects and policies.* The Haworth Press, London.

Kagan, C. and Burton, M. (2004) *Exclusión, discapacidad, y cambio social*. University of Manchester. Paper given at the Universidad Nacional Pedagógica de México, Cuernavaca and the Universidad Autónoma de México, Iztapalapa, March 2004.

Knodel, J., Kespichayawattana, J., Wiwatwanich, S. and Saengtienchai, C. (2007) *Migration and intergeneracional solidarity: evidence from rural Thailand*. UNFPA Thailand, Papers in Population Ageing No.2, Bangkok.

Lafortune, G., Balestat, G. and Disability Study Expert Group (2007) "Trends in severe disability among elderly people: assessing the evidence in 12 OECD countries and the future implications" OECD Health Working Papers 26. OECD, Paris.

Lamas, D. and L.Rosenbaum, L. (2012) "Painful inequities –palliative care in developing countries" *New England Journal of Medicine* 366:199-201.

Lewis,D. and Opoku-Mensah, P. (2006) "Moving forward research agendas on international NGOs: theory, agency and context" *Journal of International Development* 18:665-75.

Lloyd-Sherlock, P. (1997) "Healthcare provision for elderly people in Argentina: the crisis of PAMI" *Social Policy and Administration* 31(4): 371-389.

Lloyd-Sherlock, P. (2006a) ""Simple transfers, complex outcomes. The impacts of pensions on poor households in Brazil" *Development and Change* (2006) 37(5):969-995.

Lloyd-Sherlock, P. (2006b) "When social health insurance goes wrong: lessons from Argentina and Mexico" Social Policy and Administration (2006) 40(4): 353-368.

Lloyd-Sherlock, P. (2013) "Beyond neglect: long-term care research in low and middle income countries" *International Journal of Gerontology* (forthcoming).

Lloyd-Sherlock, P. (2010) “Ageing and international development” in Dannefer,D. and Phillipson, C., eds. *International handbook of social gerontology* Sage Books: pp.379-388.

Moon, O, 2002, 'Alternative systems of health and welfare service delivery for older persons in developed and developing countries' in WHO (ed.) Development of health and welfare systems-adjusting to ageing Kobe: WHO Kobe Centre.

Organisation for Economic Cooperation and Development (OECD) (2005) “Ensuring quality long-term care for older people” OECD Observer Policy Brief, March 2005.

OECD (2011) *Help wanted? Providing and paying for long-term care*. OECD, Paris.

Phillips,D. and Chan, A. (2002) “National policies on ageing and long-term care in the Asia-Pacific: issues and challenges” in Phillips, D. and Chan, A. (eds) *Ageing and long-term care. National policies in the Asia-Pacific*, IDRC/Institute of Southeast Asian Studies, Ottawa/Singapore.

Prince M, Brodaty H, Uwakwe R, Acosta D, Ferri CP, Guerra M, Huang Y, Jacob KS, Llibre Rodriguez JJ, Salas A, Sosa AL, Williams JD, Jotheeswaran AT, Liu Z. (2012) Strain and its correlates among carers of people with dementia in low-income and middle-income countries. A 10/66 Dementia Research Group population-based survey. *International Journal of Geriatric Psychiatry* 27(7):670-682.

Redondo, N. and Lloyd-Sherlock, P. “Institutional care for older people in developing countries: Repressing rights or promoting autonomy? The case of Buenos Aires, Argentina” *Journal of Population Ageing* (2010) 2(1):41-56.

Schwartzer, H. and A. Querino (2002) ‘Non-contributory pensions in Brazil: the impact on poverty reduction’ ESS Paper 11, ILO Social Security Policy and Development Branch.

Seniors World Chronicle (2006) “Nigeria: with only 20 homes for the elderly, it’s a crime to be old” July 29 2006 http://www.seniorsworldchronicle.com/2006/07/nigeria-with-only-20-homes-for-elderly.html

Shetty, P. (2012) “Grey matter: ageing in developing countries” *Lancet* 379(9823):1285-87.1.

Sinunu M, Yount KM, El Afify NA. (2009) “Informal and formal long-term care for frail older adults in Cairo, Egypt: family caregiving decisions in a context of social change”. *Journal of Cross Cultural Gerontology* 24(1):63-76.

Thamprechavai S, Somerville K, Jitapunkul S, Bunnag S, Ebrahim S. (1992) “Elderly bed-blockers in a Thai teaching hospital: is it a problem?” *Journal of the Medical Association of Thailand* 75(7):418-22.

United Nations Department of Economic and Social Affairs (UNDESA) (2002) World population ageing 1950-2050. UN, New York.

UN DESA (2007) *World economic and social survey 2007 –development in an ageing world*. UN, New York.

United Nations Population Division (2005) *Living conditions of older persons around the world.* UN, New York (2005).

Wilson, G. (2000). *Understanding old age. Critical and gobal perspectives.* London: Sage.

World Bank (2002) *World development report 2002. Building institutions for markets*. Oxford: Oxford University Press.

World Bank (2007) From red to gray. The "Third transition" of ageing populations in Eastern Europe and the Former Soviet Union. World Bank, Washington D.C.

World Health Organisation (WHO) (2002) A long-term care futures toolkit. Pilot edition. WHO, Geneva.

WHO (2010a) Global status report on noncommunicable diseases 2010. WHO, Geneva.

WHO (2010b. Strengthening the capacity of governments to constructively engage with the private sector in providing essential health care services. Report by the Secretariat to the 63rd World Health Assembly. Geneva: WHO.