

Elder care and intergenerational relationships in rural Yogyakarta, Indonesia

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ABSTRACT

In Indonesia, as in most other societies, intergenerational relationships are considered most important for elder care. Children are expected to take care of their elderly parents. However, processes of social change such as industrialisation, urbanisation and migration can have a negative impact on care for elderly people, particularly in rural areas. This paper addresses the issue of the living and care arrangements of older people and possible changes therein. A number of hypotheses and research questions pertaining to this issue are discussed. An Elderly Household Survey was carried out among people aged 55 years and older in two different villages in the Special Region of Yogyakarta. The data concern the living and care arrangements according to the respondent's sex, age and village. The principle finding is that most older people still live with at least one child or with other kin, or have at least one child living in the same village. Hence, they still have a potential care provider in their immediate vicinity. The situation, however, especially of women aged over 75 years, seems to be problematic.

KEY WORDS – elder care, intergenerational relationships, living arrangement, care arrangement, support, Indonesia.

Introduction

The Indonesian archipelago contains a population of 206.3 million people (1996), made up of various ethnic cultures, of which two-thirds live on the island of Java. The proportion of older people is still small compared with Western countries, namely 6.3 per cent aged over 60 years, but is increasing at a remarkably high rate. The elderly population is projected to increase by 191 per cent from 1996 to 2025 (US NIA 1996). The Special Region of Yogyakarta, a province in the central part of Java, is a frontrunner in the ageing process. Although

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the majority of the whole population still lives in rural areas (60 per cent in 1999) (World Bank 2001), the majority of the population in the Special Region of Yogyakarta live in urban areas (71 per cent in 2000) (Kasto and Sembiring 1996). In the Special Region of Yogyakarta the volcano Merapi marks the North and the Indian Ocean marks the South. The two research villages lie south of the city of Yogyakarta, in the regencies Bantul and Gunung Kidul. Kebonagung is a lowland village, where they usually cultivate rice on irrigated land (*sawah*), while Giriwungu is situated in the highlands, where they usually cultivate cassava on dry fields (*tegal*).

Developing countries in Asia offer a wide variety in cultural practices regarding care for and intergenerational relationships of older people¹. The Javanese have a bilateral kinship system that is generally characterised by the values of showing respect (*hormat*) and maintaining harmonious social appearances (*rukun*) towards older and senior relatives (Geertz 1961: 146–53; Koentjaraningrat 1957: 85–91)². The majority of the population adheres to Islam, a religion that emphasises intergenerational concern, kindness and mutual obligations, especially in matters of subsistence and general care (Hammudah 1977: 182–207). However, the village religious system commonly consists of a balanced integration of animistic, Hindu and Islamic elements, a basic Javanese syncretism that is the true folk tradition in the central parts of Java (Geertz 1960). The main differences for older people living in rural and urban areas are that in the villages most people continue to work, people are less economically dependent of their children, the average monthly household income is *more* sufficient for daily needs³ and the health condition is less satisfactory (Keasberry 1997; Population Studies Center 1999; Rahardjo *et al.* 1994: 25)⁴.

Indonesian society is changing. Traditionally, Javanese children have the obligation to take care of their parents, especially when the parents have stopped working (Koentjoeraningrat 1957: 68). When Javanese people become old and are no longer heads of complete households, no longer have young children, and no longer are economically productive, they live with their children or sibling's children or grandchildren (Geertz 1961: 145). In practice, this often meant that the youngest child, preferably a daughter, stayed behind in the parental house and co-resided with the parents even after marriage. The intergenerational relationships guaranteed the parents' care and support in their old age. However, we expect that these kinds of living arrangements are changing as a consequence of processes of social change, and that this will also affect the elder care practices⁵. In the near future Indonesian people will be less certain that their children

will care for them in their old age (Andrews 1992: 25; Mason 1992: 25).

Little research has been carried out on care for elderly people in Indonesia, while the population is ageing and the needs of especially the rural older people need to be investigated (Niehof 1995). This paper attempts to fill a gap of knowledge to be able to anticipate future needs of elderly people and to formulate appropriate policies. It reports research findings on two aspects of intergenerational relationships in elder care: first, the living arrangements of elderly parents and their children; secondly, the care arrangements for elderly people. Based on the general research assumption that processes of social change can have a negative impact on care for elderly people, we developed hypotheses and research questions about the following issues:

- the composition of the elderly household,
- the number, availability and co-residence of children,
- the preference for co-residence with a daughter and
- the proximity of children.

Hypotheses and research questions about the needs of older people and sources of support focus on the following types of care:

- instrumental activities of daily life,
- personal activities of daily life,
- monetary support and
- material support.

Data and methods

The data used in this report come from the Elderly Household Survey carried out among people aged 55 years and older in two villages in Special Region Yogyakarta of Indonesia in February–March 1997. Two different villages were selected in order to compare the different impact of migration, prosperity and agricultural possibilities on elder care. Kebonagung (sub-district Imogiri, regency Bantul) was selected as a relatively, more prosperous village with economic opportunities outside agriculture, but still with the main employment in agriculture. Giriwungu (sub-district Panggang, regency Gunung Kidul) was selected as a poor village with limited agricultural possibilities and almost no other opportunities to generate income. It was hypothesised that the level of outmigration would be higher in Giriwungu compared with Kebonagung.

The sample framework consisted of the General Election Lists (*Daftar Pemilu*) for the Parliament's Election of May 1997. A random

sample was drawn from all the people older than 55 years. The total sample size consisted of 397 elderly respondents.

A team of six female and five male graduates in anthropology and human geography conducted the interviews in Javanese. The non-Javanese speaking researcher and an assistant co-ordinated the survey. The survey was carried out using a questionnaire and face-to-face interviews. The questionnaire consisted of three parts. The questions in the first part were posed to an individual and concerned socio-demographic status, health status, economic status and the care arrangements of the older person ($N = 355$). The questions in the second part concerned household composition and socio-economic status of all household members. They were posed to an adult household member of the elderly respondent, because we assumed that these detailed questions were too difficult for older people ($N = 397$). The questions in the third part were posed to an adult household member of the older respondent if they could not answer the first part themselves. The third part consisted of a short version of the first part ($N = 42$).

The functional capacities of the respondents were assessed by two different measures, the ADL and IADL scale, and they were also asked whom they would ask for help if they needed it. The respondents were asked to what extent they could perform personal activities of daily life (ADL) and instrumental activities of daily life (IADL). The five answering categories and scores for each item were: 1 not at all, 2 only with help, 3 with a great deal of difficulty, 4 with some difficulty, and 5 without difficulty. Five questions were asked about the personal activities of daily life, which provided an ADL scale ranging from five to 25. Nine questions were asked about the instrumental activities of daily life, which provided an IADL scale ranging from nine to 45. The ADL as well as the IADL items formed a homogeneous scale (Cronbach's alpha is respectively 0.87 and 0.96). We also asked from whom the respondents received monetary and material support at both the individual and the household level. The data were prepared and analysed with the advanced statistical programme SPSS.

Living arrangements of elderly parents and children

The way older people live determines to a large extent what support they receive and from whom, especially in a country, such as Indonesia⁶, where there is virtually no old-age security system. The

way people usually live also determines what their perspective and expectations are with regard to the support they need. In Indonesia most people, especially those whose primary source of income is agriculture, live with their children (Molyneaux 1990: 119) and much support is likely to be provided by the household members. That support is then not specifically provided for the older person, not because they could not perform the activity themselves any more, but because it is the responsibility of a younger member to provide it for the whole household. The paper describes the living arrangements of the older people and their children in order to understand from whom they may receive support within their own household. Based on this we formulated the following hypotheses:

- Elderly people are not mainly co-residing with their children any more, but they have other types of household arrangements, especially in Giriwungu, where more children have migrated to areas with better economic possibilities than in Kebonagung.
- Elderly people who live in Giriwungu experience more outmigration of the young generation and therefore have fewer children directly available as care providers than elderly people who live in Kebonagung.
- Elderly parents have a preference for co-residence with a daughter (and her family).
- The urban areas of the municipality Yogyakarta and the capital Jakarta are major pull factors for labour migration of the young generation especially in Giriwungu, so elderly parents will live at a longer distance from their children and have less access to support provided by the children.

The second section of the paper describes the care arrangements in order to understand what kind of support older people need and what they receive from whom.

Composition of elderly household

Table 1 presents the results of the Elderly Household Survey with regard to household composition by sex, age and residence. A very small proportion lived alone and 10 per cent lived together with their spouse only. Almost half of the sample lived with a spouse and other(s), and about a third lived with other(s) only. Other(s) could be parents, siblings, nephews/nieces, great-grandchildren and child's parents-in-law (*besan*), but usually were their own child(ren), a child-in-law and/or grandchildren. The population statistics of the villages showed

TABLE 1. *Elderly household composition by sex, age and village (%)*

Elderly household composition	Sex		Age group			Village		Total
	Male N = 162	Female N = 235	55-64 N = 148	65-74 N = 123	75+ N = 126	KA N = 194	GW N = 203	N = 397
Alone	0.6	6.0	2.7	4.1	4.8	6.2	1.5	3.8
With spouse	11.7	9.8	12.8	8.1	10.3	11.9	9.4	10.6
With spouse and other(s)	70.4	32.8	61.5	50.4	30.2	49.5	46.8	48.1
With other(s)	17.3	51.5	23.0	37.4	54.8	32.5	42.4	37.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Test scores ^a	$\chi^2(3) = 65.7^{***}$ p = 0.000		$\chi^2(6) = 34.6^{***}$ p = 0.000			$\chi^2(3) = 9.1^{**}$ p = 0.028		

^a Chi-square test: *** p < 0.01; ** p < 0.05; * p < 0.10.

that most households consisted of two generations when there are no elderly people, and of at least three generations with elderly people.

The few people who lived alone ($N = 15$) were mainly women in the highest age group of 75 years and older living in Kebonagung. Forty per cent of these people had no living children. Sixty per cent had only non-co-residing children, who were mostly still living in the same village as their parent.

The variables sex, age and village had a strong significant effect on household composition. Men were more likely to live in a household with their spouse and other(s) than women did. This can be explained by the fact that men are almost twice as often married and that women are almost four times as often widowed. The prevalence of the household type 'elderly person, spouse and other(s)' declines significantly with age, while the prevalence of the household type 'elderly person and other(s)' increases with age. This can be explained by the fact that achieving a higher age is accompanied by the loss of a spouse. The strongest effects of the variable residence are on the household types 'elderly person living alone', already discussed, and 'elderly person and other(s)'. In Giriwungu a higher percentage of elderly people live only with other(s) than in Kebonagung. This can be explained by the fact that fewer respondents were married and more respondents were widowed in Giriwungu⁷.

Availability of children

Most people had between two and five children who were still alive with a mean of 3.3 children. The largest families with parents aged 55 years and older had 11 children. Table 2 shows that almost a quarter of the respondents did not co-reside with a child (23.9 per cent) and more than half co-resided with only one child (55.9 per cent). The rest of the respondents lived together with two to six children (20.2 per cent). Most respondents also had (other) children with whom they did not share a household. The majority had one to 10 non-co-residing child(ren) (83.6 per cent). Still, 65 respondents did not have any child living outside their own household (16.4 per cent). Only 4.3 per cent of the respondents had no living children. Given the absence of a social security scheme, these childless people are probably more vulnerable when they are in need of support.

Table 3 presents the children's availability and co-residence in relation to the parents. As already mentioned, very few people had no children at all. More than a tenth had only children who co-resided in the same house and almost a fifth did not co-reside with a child but only

TABLE 2. *Elderly households with number of co-residing children, non-co-residing children and total number of children still alive*

Number of children	Number of co-residing children		Number of non-co-residing children		Total number of children still alive	
	Freq.	%	Freq.	%	Freq.	%
0	95	23.9	65	16.4	17	4.3
1	222	55.9	70	17.6	42	10.6
2-11	80	20.2	262	66.0	338	85.1
Total of elderly hhds.	397	100.0	397	100.0	397	100.0

TABLE 3. *Availability and (non-)co-residence of children by village of elderly parent*

Availability and (non-)co-residence of children	Kebonagung		Giriwungu		Total	
	Freq.	%	Freq.	%	Freq.	%
No children	10	5.2	7	3.4	17	4.3
Only co-residing children	26	13.4	22	10.8	48	12.1
Only non-co-residing children	52	26.8	26	12.8	78	19.6
Co-residing and non-co-residing children	106	54.6	148	72.9	254	64.0
Total	194	100.0	203	100.0	397	100.0
Test scores ^a	$\chi^2(3) = 16.3^{***}$, $p = 0.001$					

^a Chi-square test: *** $p < 0.01$; ** $p < 0.05$; * $p < 0.10$

had children who lived outside their house. Almost two-thirds had both co-residing and non-co-residing children. The availability and (non-)co-residence of children differed significantly according to where they lived.

Kebonagung had twice as many respondents who had only non-co-residing children as Giriwungu. Kebonagung had a much smaller proportion than Giriwungu of respondents who had both co-residing and non-co-residing children. So far, these findings do not support our hypothesis that Giriwungu experiences more out-migration of the younger generation.

Elderly people who had no co-residing children consisted of people without any children and people who had only non-co-residing children. Six childless people, all women, lived alone (1.5 per cent), but most childless people co-resided with other kin.

The majority of people who had only non-co-residing children, lived with their spouse (52.6 per cent) and others (24.4 per cent), or with others only (11.5 per cent). A minority of these people lived alone (11.5

per cent). Although gender had no significant effect on the availability and proximity of children in the form of co-residence, older people who had only non-co-residing children were twice as often female. If these non-co-residing children live far away from their parents then these people will be deprived of care from their children also. However, as Table 5 shows, most non-co-residing children, who had no siblings co-residing with their parents, still lived in the same village as their parents. The majority of the respondents, who only had non-co-residing children, had at least one child living in the same village (76.9 per cent), and hence the possibility to receive support from a child.

Preference for child's co-residence

As children are traditionally the primary caregivers of older people, their gender and proximity are important. An issue here is a possible preference of parents for living with a daughter or with a son. The proximity of the children was studied to indicate the distance between parents and their children.

It is generally believed that Indonesian elderly people have a preference for living with a daughter⁸. Since household chores like preparation of meals, washing clothes and cleaning the house are female tasks, it consequently means that parents would ask for it from a daughter, or a daughter-in-law when they co-reside with a son. Parents would more easily ask for care and support within the household from a blood-related daughter, because she owes it to them, than from a daughter-in-law. Table 4 shows the results for co-residence with children divided into sons and daughters.

If we consider the parents who co-resided with only daughter(s) or son(s) (N = 258) and not with a combination of daughter(s) and son(s), we find a weak significant preference for co-residence with daughters⁹. As explained, we expected that all parents would have a preference for co-residence with a daughter. However, Table 4 shows that fathers had a significant preference for co-residence with daughters and mothers had a significant preference for co-residence with sons. This finding will have to be explored further.

Age and residence also had significant effects on preferences. Persons not living with a child or living with a combination of sons and daughters were most frequently among the youngest elderly parents. They are probably still healthy and strong and hence can still take care of themselves. Besides, this generation usually invest(ed) a lot in the education of their children, and possibly stimulated them to find work outside agriculture for which they had to leave the village. This age-

TABLE 4. Preference for co-residence with sons or daughters by sex, age and village of elderly parent (%)

Elderly parent	Sex		Age group			Village		Total N = 397
	Male N = 162	Female N = 235	55-64 N = 148	65-74 N = 123	75+ N = 126	KA N = 194	GW N = 203	
Not co-residing with child	19.0	27.4	24.3	23.4	24.0	32.0	16.3	23.9
Co-residing with:								
only son(s)	26.4	30.8	34.5	25.8	25.6	31.4	26.6	29.0
only daughter(s)	39.3	33.8	25.7	43.5	40.8	24.4	47.3	36.0
combi. of son(s) and daughter(s)	15.3	8.1	15.5	7.3	9.6	12.4	9.9	11.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Test scores ^a	$\chi^2(3) = 8.8^{**}$ p = 0.033		$\chi^2(6) = 14.2^{**}$ p = 0.028			$\chi^2(3) = 26.2^{***}$ p = 0.000		

^a Chi-square test: *** p < 0.01; ** p < 0.05; * p < 0.10.

group can also still have children who are not yet adults or not yet living on their own, which explains why they co-reside most often with several children.

Persons aged 65 years and older had a clear preference for co-residence with daughters. This, coupled with the fact that parents living in Giriwungu also had a strong preference for co-residence with daughters, might indicate that it is a more traditional preference. It might also partly support the hypothesis that Giriwungu experiences more out-migration, but that it applies only to sons, and that daughters stay behind to take care of their parents. However, the proportion of older people in Kebonagung not living with children is twice that in Giriwungu.

Proximity of children

Table 5 presents the results for the proximity of children. It gives an indication of the distance between parents and their potential sources of support. Part I of the table shows that more than half of all the children in the sample lived in the same village as their parents, 31.1 per cent in the same household and 25.6 per cent outside their parents' household. Part II of the table presents the proximity of at least one child per type of residence of the child by the sex, age and residence of the elderly parent. Parents could have several children who lived outside their household in the same village or beyond, but we did not distinguish according to the number of children in the second part of this table. The percentages represent the proportion of the whole sample ($N = 397$). The Chi-square test was carried out for each category divided into no child(ren) and at least one child.

The sex of the parent had a weak significant effect on having co-residing children. Men co-resided slightly more often with child(ren) than women did. Perhaps women can take care of themselves better than men, the latter never having been used to performing household chores. This effect is opposite to the effect that gender had on having non-co-residing child(ren) in the same village. Of these parents, mothers more often than fathers had non-co-residing children in the same village. Mothers also more frequently had several children living outside their household in the same village.

Village also had a significant effect on both co-residing and non-co-residing children living in the same village as their parents. People from Giriwungu more frequently lived together with a child, had at least one other child living in the same village and had several children

TABLE 5. *I. Proximity of all children in sample compared to residence of elderly parent(s); II. Proximity of at least one non-co-residing child by sex, age and village of elderly parent (%)*

Proximity of children (est. max. distance)	II (N = 397)											
	I		Sex			Age group			Village			
	Freq.	%	Male N = 162	Female N = 235	Sign ^c	55-64 N = 148	65-74 N = 123	75+ N = 126	Sign ^c	KA N = 194	GW N = 203	Sign ^c
Children co-residing with parent(s)	413	31.1	81.0	72.6	*	75.6	76.6	76.0	n.s.	68.0	83.7	***
Children non-co-residing with parent(s) in:												
same village	340	25.6	43.2	54.0	**	43.9	54.5	51.6	n.s.	44.3	54.7	**
same regency (15/45 km ^a)	144	10.9	21.0	31.9	**	25.0	27.6	30.2	n.s.	38.1	17.2	***
municipality Yogyakarta (15/25 km ^a)	28	2.1	5.6	6.8	n.s.	10.1	4.1	4.0	*	7.7	4.9	n.s.
other regency D. I. Yogyakarta (55/50 km ^a)	30	2.3	6.2	6.0	n.s.	4.7	7.3	6.3	n.s.	7.2	4.9	n.s.
Central Java (110 km ^a)	21	1.6	3.7	3.8	n.s.	2.0	4.1	5.6	n.a.	4.6	3.0	n.s.
other area on Java (450 km ^a)	186	14.0	34.2	26.0	*	38.5	27.9	19.8	***	30.4	28.2	n.s.
other area in Indonesia (3,500 km ^a)	154	11.6	25.3	24.7	n.s.	26.4	22.0	26.2	n.s.	19.6	30.0	**
outside Indonesia	11	0.8	3.7	2.1	n.a.	3.4	4.1	0.8	n.a.	5.7	0.0	***
Total	1327 ^b	100.0										

^a Estimated distance maximally possible between the village of the elderly parents and the children who do not live in the same village measured in a straight line in kilometres. The first figure stands for the village Kebonagung, the second for Giriwungu. As from Central Java the distances are so large that the difference between the two villages are negligible.

^b Total does not sum up to the total sample (N = 397) because the respondents could have more than one child.

^c Chi-square test: *** p < 0.01; ** p < 0.05; * p < 0.10; n.s. no significant difference; n.a. not applicable because the cell filling of expected count is less than five.

living in the same village. This, again, is contrary to our expectation that people in Giriwungu would experience more out-migration of the younger generation and that they would be left behind without any child who would take care of them more often than in Kebonagung.

The other data in Table 5 indicate the distances between the parents and the children who lived outside the study villages. When we consider the distances in kilometres, we have to keep in mind that Giriwungu and a large part of its regency Gunung Kidul is a mountainous area, which complicates travelling. Local public transport is much better in the lowlands around Kebonagung and its regency Bantul than in Gunung Kidul. Parents in Giriwungu have significantly fewer children living outside their village in the same regency than parents in Kebonagung. The regency Bantul is one of the poorest regencies in the Special Region Yogyakarta (*Daerah Istimewa Yogyakarta*). When children move for economic reasons, they are more likely to do so to other areas rather than within the same regency.

It was expected that the city Yogyakarta would be a pull factor for labour migration of the younger generations, especially from the poor village of Giriwungu. However, this hypothesis is not proven by the survey results. Perhaps this is because, on the one hand, people commute between the city and the home village and, on the other, people had not (yet) registered in the city if they do live there most of their time. Only age had a weak significant effect on non-co-residence of children in the municipality Yogyakarta. The older the parents become, the less frequently they have children who live there. The youngest elderly people more often have at least one child living in the city of Yogyakarta.

The 'other area on Java' category includes the capital Jakarta, which we also expected to be a pull factor for labour migration of the younger generations. Again, no significant difference in this respect was found between Kebonagung and Giriwungu, from which we may conclude that the distance between, and the different economic situation of, these villages do not have an important effect on the outmigration of children to other areas on Java. Age had a strongly significant, negative effect on the residence of children in other areas of Java. Being older is accompanied with having fewer children living in other areas on Java. This suggests that it may be a relatively new trend that young people migrate for work, influenced by the higher levels of education they attain nowadays.

The other areas in Indonesia consist of the islands other than Java for which one has to travel at least some days by boat or by air and other means of public transport. Travelling is time-consuming and expensive,

which complicates the contact and support between the child and elderly parent. Village had a significant effect on at least one of the children living in other areas (than Java) in Indonesia. Elderly parents in Giriwungu more often had children who lived this far away because there were several transmigration projects in the past¹⁰. Since the transmigrated people are usually economically better off, this still forms a pull factor for relatives who live in the poor village of Giriwungu.

There were not many children living outside Indonesia in the survey sample, but their elderly parents all lived in Kebonagung. Probably because people in Kebonagung have more economic opportunities they are able to afford to send some children abroad. While the children are still abroad they usually send remittances home, which are unbelievably high by local standards.

Elder care arrangements

In this section consideration is given to the following research questions:

- How have older people arranged their care and support?
- What kind of help do older people receive?
- From whom do older people receive help?

Discussion centres first, on support for the instrumental activities of daily life (IADL) and the care for the personal activities of daily life (ADL) provided to the older person, usually within their own household; secondly, on the monetary and material support provided to older persons individually and to the whole elderly household by sources from outside the household.

Instrumental activities of daily life

The instrumental activities of daily life (IADL) that we asked about consisted of shopping for daily groceries, cutting firewood, fetching water, boiling water, cooking meals, doing the laundry, sweeping the yard, cleaning the house and feeding the livestock. The scale mean was 41.32, which indicates that on average elderly people could perform these tasks without difficulty.

The IADL categories differed significantly for the variables age and village¹¹. The youngest people (55–65) could still perform most instrumental activities of daily life without difficulty and the oldest people aged 75 and older could not, or could only do so with help. The difference in the total IADL score between the villages was only of weak significance. Older people in Giriwungu had bad health or were

less strong to only a little extent compared with older people in Kebonagung.

Support for all kinds of IADL to the few people who needed help was mainly given by female household members (66.2 per cent) of whom the daughter was the primary support giver. Less than a third of the IADL support was given by male household members (29.2 per cent), who helped most often with the heavier tasks of cutting firewood and feeding livestock. Non-household members provided little IADL support.

Looking at the IADL score by household type, the few people who lived alone (N = 15) all had a high IADL competency. This suggests that only people who can take care of themselves live alone. Those who cannot will either co-reside with others, or do not survive. The majority of the older people who had a low IADL competency and who needed support (N = 26) lived with others (73.1 per cent) and tended to be older.

Not many frail elderly people needed help with the IADL. People who live in the rural areas of Indonesia do not have a fixed moment in time for retirement after which they abruptly stop working. These elderly people appear to retain their capability of performing instrumental activities because they are still active every day (Caldock and Wenger 1992). Besides, the majority of the older people live with child(ren) in a three-generational household. When the younger generation(s) gradually take over activities from their elderly (grand) parents they perform them for the whole household and not especially for the older people, and it is perhaps not felt by the the older people that they cannot perform them any more.

Personal activities of daily life

The personal or physical activities of daily life (ADL) that were asked about consist of washing oneself, using the toilet, dressing and undressing, standing up from and sitting down in a chair, and walking outdoors for five minutes without resting. The item mean was 4.94. On average people could perform personal activities of daily life without difficulty. Surprisingly, the large majority had a very high ADL score and only six respondents had low or moderate ADL scores (N = 396). The very few who could not perform the personal activities (1.5 per cent) or had great difficulty in doing so were mainly helped by a co-residing daughter. (The ADL scale had not sufficient power of discernment to be used for further analysis.)

Why did so few people need help with the ADL? The respondents

could have given socially desirable answers pretending to be healthier than they were, or perhaps did not understand how to respond to the answer categories. During the qualitative fieldwork, however, people who were bedridden or who demonstrated symptoms of dementia were sought out. Only a few were found. The personal activities of daily life are usually the last activities that others will take over. Apparently, people seldom reach an age at which they need help with the ADL or they die relatively soon when they cannot perform these activities themselves anymore.

Monetary support

Monetary support was defined as money that is given to the elderly person individually, or to the household of the elderly person during the previous year at the time that the Survey was carried out. Often, it was not clear to which member of the household the monetary support was given. Furthermore, if it was given to the oldest member, then it was often spent on basic needs for the whole household. Therefore, we did not ask the elderly people what amounts of money they received, but only if they received money and from whom. A household member was asked about the amounts of money they received at the household level and from whom.

Of all respondents ($N = 355$) less than half received monetary support individually (43.1 per cent). On average, they received money 17.6 times per year, which is about every three weeks. Village had a strong significant effect on the number of monetary support sources. People in Kebonagung received money almost twice as often and from more sources than people in Giriwungu¹². Since Kebonagung had more economic possibilities, the support providers probably also had more access to money in this village. Besides, Kebonagung – with its opportunities outside agriculture – is more of a cash economy than Giriwungu, where the main occupation is farming, and hence has more the character of a self-subsistence economy.

The main sources of monetary support were adult children either living in the same household (32.9 per cent) or in another household (43.3 per cent). Of all the monetary support from children that is provided individually to parent(s), sons provided a larger proportion than daughters did. Adult children, who did not co-reside with their parents, mainly provided monetary support that was given to the parent's household (76.0 per cent). Other kin (12.1 per cent) and non-kin (11.9 per cent) were the other sources. The average amount per

year was 133,000 Rupiah provided by children, 11,000 Rupiah by other kin and 8,000 Rupiah by non-kin.

Table 6 shows that half of the households received monetary support from people outside the household with an average amount of almost 150,000 Rupiah per year¹³. Part I in the table presents the average amounts of monetary support by sex, age and village. Gender and residence affected the amount of monetary support received. Households with older women received more frequent smaller amounts of monetary support than households with older men¹⁴. Households in Giriwungu more frequently received lower amounts than households in Kebonagung. In Kebonagung the average amount received was two-and-a-half times larger than in Giriwungu. Although the mean amounts of monetary support clearly decrease with age, we did not find a statistically significant effect of age.

Household composition had a strongly significant effect on the amounts received from people outside the household. The majority of older people who lived alone received monetary support (86.7 per cent). About half of each other household type received monetary support for which the amounts seemed to depend on the size of the household.

Material support

The material support that was given at the individual or household level consisted of food, clothes, medicines, animals, building materials, cigarettes and luxury goods such as a radio, television or scooter. The large majority (N = 355) did not receive any material support (73.2 per cent). A quarter of them received material support from one to six sources, which consisted mainly of food (14.1 per cent) and clothes (11.5 per cent). On average the people received material support 38.3 times per year, which is about every 10 days.

Sex and age had a significant effect on the number of material support sources¹⁵. Older women received it more often, usually from fewer sources (32.5 per cent from 1–2 sources) than older men did (18.8 per cent from 3–6 sources). People aged between 55 and 64 years received the least frequent material support (17.2 per cent). People aged older than 75 years received the most frequent material support (40.0 per cent) from the highest number of sources. Older women and the oldest people most frequently received material support.

Adult children were the main sources of material support, whether they were living within the household (31.4 per cent) or outside it (47.4 per cent), the proportions being similar to the received monetary

TABLE 6. *Mean monetary and material support given to elderly household (N = 397) by sex, age, village and household composition*

	N	I		II	
		Mean monetary support	Test scores ^a	Mean material support	Test scores ^a
Sex:		$\chi^2(3) = 7.7^*$, $p = 0.052$		$\chi^2(3) = 1.0$, $p = 0.790$	
male	162	Rp 191,892		Rp 58,511	
female	235	Rp 118,630		Rp 54,728	
Age group:		$\chi^2(6) = 8.0$, $p = 0.235$		$\chi^2(6) = 16.3^{**}$, $p = 0.012$	
55-64	148	Rp 236,331		Rp 62,263	
65-74	123	Rp 112,907		Rp 59,066	
75+	126	Rp 80,159		Rp 45,950	
Village:		$\chi^2(3) = 20.8^{***}$, $p = 0.000$		$\chi^2(3) = 5.5$, $p = 0.140$	
Kebonagung	194	Rp 214,539		Rp 56,300	
Giriwungu	203	Rp 85,438		Rp 56,246	
Household composition:		$\chi^2(9) = 29.4^{***}$, $p = 0.001$		$\chi^2(9) = 5.9$, $p = 0.746$	
Elderly alone	15	Rp 81,533		Rp 25,857	
Elderly and spouse	42	Rp 42,381		Rp 51,957	
Elderly, spouse and others	191	Rp 217,113		Rp 56,781	
Elderly and others	149	Rp 97,269		Rp 60,068	

^a Chi-square test: *** $p < 0.01$; ** $p < 0.05$; * $p < 0.10$. The four categories of monetary support amounts and material support values were divided in 0; 1-49,999; 50,000-249,999; $\geq 250,000$ Rupiah.

support. However, differences in gender of children providing material support were less apparent. Of all the material support that was provided, daughters provided the largest proportion when in the household, and sons provided the largest proportion when outside the household. The respondents received material support from non-co-residing children with an average value of 30,833 Rupiah in the previous year. Very few respondents received material support from non-co-residing kin other than children (6.4 per cent) and its value was not substantial (average value of 1,000 Rupiah). Only 3.8 per cent of the respondents received material support from non-kin, especially project aid from Non-Governmental Organisations (NGO)¹⁶, with an average value of 18,050 Rupiah. The households in the poorer village Giriwungu received material support from non-kin (12.3 per cent) twice as frequently as the households in the more prosperous village Kebonagung (6.2 per cent).

Half of the households ($N = 397$) received material support from outside the household with an average value of 56,272 Rupiah per year¹⁷. They received mainly clothes and shoes (33.8 per cent) and food

(15.6 per cent), and in a few cases building material (5.5 per cent), livestock such as a goat or cow (1.6 per cent), luxury goods like a motor cycle, television or radio (1.3 per cent), tobacco products (1.0 per cent) and medicines (0.8 per cent). Part II in Table 6 presents the average value of material support by sex, age and village. The material support values were only significantly different for the age of the respondents. Becoming older had a positive effect on the frequency but a negative effect on the value of the material support.

Conclusions

Regarding the specific hypotheses and research questions formulated, the main findings can be summarised as follows. Most elderly people in our study villages lived close to (at least some of) their children and hence could still receive support from them. However, a large majority of the older people did not need help with the instrumental and personal activities of daily life because they could still perform them without difficulty. Typically, a co-residing daughter helped the very few elderly people who needed help with these activities. Older people appeared to have a weak preference for co-residence with a daughter, although older mothers had a preference for co-residence with sons.

We were unable to prove the hypothesis that the poor village of Giriwungu experienced more out-migration of the younger generation than the more prosperous village of Kebonagung. Elderly people from Giriwungu more frequently lived together with a child, had at least one other child living in the same village and had several children living in the same village. Neither could we prove the hypothesis that the city of Yogyakarta and the other areas on Java, including the capital Jakarta, are stronger pull factors for the people in Giriwungu than for those in Kebonagung. The distance between, and the different economic situation of, these villages did not have an important effect on the outmigration of children to other areas on Java. Nevertheless, elderly households in Giriwungu had significantly more children who migrated to other areas in Indonesia as a result of transmigration projects. Elderly households in Kebonagung had significantly more children who (temporarily) migrated outside Indonesia. These children usually sent large numbers of remittances back home. Hence, the monetary support that households received was two-and-a-half times larger in Kebonagung than in Giriwungu.

Less than half of the respondents received monetary support and only about a quarter of the respondents received material support

individually. In general these kinds of support were provided quite regularly: monetary support approximately every three weeks and material support approximately every 10 days. The material support usually consisted of food and/or clothes. The main sources for monetary and material support were sons.

The assumption that processes of social change, like industrialisation and urbanisation, would have such an effect on the elder care that older parents would be left behind and neglected by their migrated children appeared to be unfounded. We may conclude that the shift to a money economy and international labour migration of children increases monetary support for older people. Fortunately, the situation of most older people was not as bad as we had anticipated. Perhaps it is still too early to establish the possible effects of social change on care for older people in Indonesia. Or perhaps the reality for the elderly Javanese is more complex, and we should look at more or different variables than the ones considered in this paper. For instance, the fact that elderly people are mainly farmers in Giriwungu and can provide for their own subsistence by agricultural yields may increase their need for monetary or material support from children.

There are, however, certain groups of people that are vulnerable. The position of women aged more than 75 years warrants attention. Women are more likely to live alone and be childless. If they do receive monetary support, the amount will be lower than that received by older men. The oldest elderly people are also more likely to live alone or to be widowed. Moreover, the households with the oldest elderly members received on average the lowest amounts of monetary support and values of material support. It is clear that as demographic ageing progresses, more research is necessary to understand the situation of the Indonesian elderly people and their needs.

NOTES

- 1 For studies on elder care and intergenerational relationships in South-East Asia except Indonesia see: Caffrey 1991, 1992 *a, b*; Domingo and Casterline 1992; Hirtz 1995; Knodel *et al.* 1995; Mehta 1992, 1997; Trelloggen 1993; Wongsith 1992.
- 2 For studies on kinship relationships in Indonesia see also: Bruce 1992; Jay 1969; Koentjaraningrat 1967; Molyneaux *et al.* 1990; Mboi 1994; Nag *et al.* 1980; Setiabudhi 1993.
- 3 The monthly household income is more sufficient for daily needs in rural areas than in urban areas if the household income is defined as the total of income in cash (wage or pension) earned by, and income in kind (agricultural yield or products), produced by the household members.

- 4 For other studies on Indonesian elderly people see: Adi 1982; Boedhi-Darmojo 1987; Esmara and Tjiptoherijanto 1986; Evans 1987, 1990; Griffin 1986; Hugo 1996; Kris and Boedhi-Darmojo 1987; Matulesy *et al.* 1990; Muis and Hertanto 1987; Niehof 1995; Prawitasari 1993; Rahardjo and Suharman 1993; Rahardjo and Daliyo 1995; Rudkin 1992, 1993, 1994; Sigit 1988; Sunarto 1978; Syryani *et al.* 1988; Wirakartakusumah *et al.* 1994.
- 5 See Keasberry (1998) for a detailed discussion of the possible implications of social change for elderly care in rural Java.
- 6 In Indonesia only regular civil servants like military employees, government officials and teachers retire and receive a pension, which is usually not sufficient to live on. People who perform informal labour do not have an official retirement age not to mention a pension.
- 7 In the villages Kebonagung and Giriwungu respectively marital status consisted of single/not (yet) married elderly 1.1 per cent and 1.7 per cent; married elderly 65.4 per cent and 61.9 per cent; widowed elderly 28.5 per cent and 35.2 per cent; divorced elderly 5.0 per cent and 1.1 per cent.
- 8 Koentjaraningrat (1957: 68) reported that after the death of her husband, old mothers prefer to live with a daughter because that is more logical with regard to household matters than to live with a daughter-in-law. Although all of his informants maintained that neither the bride's nor the groom's family was as a rule favoured in the choice of residence, Jay (1969: 40) observed a clear statistical bias in favour of residence with or near the bride's parents. In Java all children have the obligation to take care of their parents. So if the parents only have sons, or if all daughters already live with their parents-in-law, they can still choose to live with a son. These findings are contrary to findings in East-Asian countries. For people in China, Japan and Korea, for instance, it is very important to have a son because the (eldest) sons are responsible for ageing parents (Wenger and Liu 1999: 5; Sodei 1999: 22; Park 1999: 32).
- 9 If we assume that elderly parents do not have a preference for co-residence with either sons or daughters, then the distribution of co-residence with only sons and co-residence with only daughters would be equal (expected values are 129 for each). However, the test scores are $\chi^2(1) = 3.0^*$ and $p = 0.081$, a weak significant preference for co-residence with daughters.
- 10 Transmigration projects are part of a governmental programme for redistributing the population between the densely populated island of Java and the much less densely populated so-called 'Outer Islands'. These projects are targeted at (resource-) poor areas.
- 11 Test scores of the IADL categories were for the age groups $\chi^2(4) = 56.8^{***}$, $p = 0.000$ and for the villages $\chi^2(2) = 5.6^*$, $p = 0.062$.
- 12 The number of monetary support sources were categorised as 0, 1, 2, 3–5 sources and the test scores for the variable village were $\chi^2(3) = 26.8^{***}$, $p = 0.000$.
- 13 The exact mean monetary support that was given to the elderly households was 148,525 Rupiah. At the time of the Survey the exchange rate was 0.42 US\$ for 1,000 Rupiah. Consequently, the monetary support to the whole household of the elderly person was US\$62 per year.
- 14 This is similar to the findings of Evans' study on elderly people in the city of Solo (1987: 8).
- 15 The number of material support sources were categorised as 0, 1, 2 and 3–6 sources and the test scores were for the variables sex $\chi^2(3) = 11.8^{***}$, $p = 0.008$ and age group $\chi^2(6) = 16.3^{**}$, $p = 0.012$.
- 16 The NGO aid concerned projects to improve the living conditions by building water tanks, breeding livestock etc. particularly in Giriwungu.

- 17 The material support that elderly households received in the previous year had a mean value of US\$24 (see exchange rate in note 13).

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