

Aged Care in Indonesia: Information Needs of Health Care Professionals in Community Health Centers

Gita MK Sakti, MD, PGradDipPubHlth, MHA and Duncan P Boldy, Ph D

The Indonesian government has recently established a Community Health Service program and provided health information in the form of leaflets for health professionals working with the elderly in such centers. This paper explores the usefulness of this information to the health professionals' in relation to the capital city, Jakarta.

Key words : Indonesia; aged care; information needs; community health centers

Background

The growth of the world's elderly population has mostly been associated with developed countries; however, in world terms the greatest number and predicted increase of elderly people is occurring in developing countries (Andrews 1994:7-11). This is supported by Macfayden (1990:19-29), who pointed out that every month, the net balance of the world population aged 55 years or above increases by 1.2 million persons. More than 80 percent of this monthly increase occurs in developing countries.

Further, Andrews (1994:7-11) stated that by the year 2000, about two-thirds of the world's 600 million people aged 60 and above will be living in developing countries, compared to 50 percent in 1980. Considering Indonesia specifically, the growth in the elderly population aged 65 and above, during the period 1990 - 2025, is predicted to amount to 414 percent compared for example, to Japan (129 percent) and Sweden (33 percent).

Geographically, Indonesia is an archipelago which stretches

Gita M K Sakti, Sub-Directorate of Elderly Health, Directorate of Family Health, Department of Health, Jakarta, Indonesia

Duncan P Boldy, Department of Health Policy and Management, School of Public Health, Curtin University of Technology, GPO Box U1987 Perth, Western Australia 6845 • Tel: +61-9-351-7942

E-mail: dboldy@health.curtin.edu.au

5,100 km from east to west and 2,000 km from north to south. It has a total land area of almost two million square kilometres, consisting of over 13,000 islands of which only 31 are inhabited (Ministry of Health 1990). In 1994, the population of Indonesia was 195 million (Gunawan 1994: 74-80).

Nationally, the number of elderly people has increased by 6 million over the 20 year period upto 1990. Compared to other developing countries, Indonesia has one of the most rapidly growing aged population. This has resulted from a rapid decrease in both birth rates and mortality risk at all ages (Smith 1994:491-496). In 1990, 6.4 million Indonesians were aged 65 years or more, and the country had the tenth largest elderly population among the world's nations (Hugo 1991).

As regards health, a study conducted in 1991 in Central Java found that :

The most to the least frequent of health problems or complaints identified among participants aged 60 years or above were:

- Arthritis (49.0 percent)
- Hypertension (14.2 percent)

— Bronchitis/dyspnea	(7.4 percent)
— Diabetes mellitus	(3.3 percent)
— Falls	(2.5 percent)
— Stroke/ paralysis	(2.1 percent)
— Bone fracture	(1.0 percent)
— Chest pain	(1.0 percent)
— Cancer	(0.7 percent).

Compared to men, women were more affected by these complaints, except bronchitis, for which the reverse was true.

Eye problems leading to decreased vision were identified in most women (81.1 percent), and most but fewer men (74.1 percent).

Decrease in hearing ability applied to 20.7 percent of the respondents, whilst only 0.9 percent had or wore hearing aids.

Chewing difficulty problems were identified in 18.8 percent of men and 22.5 percent of women. Because dentures are expensive, only 11 percent of the respondents wore them (Darmojo et al. 1994).

The Indonesian government has recently established a Community Health Service Program as a key component of its mission to provide improved coverage of health services, particularly to the elderly (Ministry of Health 1991). To provide information for health professionals involved with the Elderly Health Care Program in community health centers, the Department of Health has produced a variety of leaflets. How useful such information is and whether or not it meets the health professionals' needs, is a key question posed and explored in this paper, in relation to the capital city, Jakarta.

Jakarta covers an area of 654 square kilometres, and is located in the north western part of the island of Java. It is the center of the national and local governments, trade, culture and education, and has a great influence on the development of other parts of Indonesia. It had a population of about 464,000 according to the 1993 census (Hardywinoto 1994).

Jakarta has 314 community health centers, of which 43 are sub-district centers, and the remaining 271 village centers.

Overall, these centers are served by 13 specialist doctors, 413 general practitioners, 295 dentists and 2,290 nurses (Hardywinoto 1994). Thirty five of the sub-district centers were actively involved in the ongoing Elderly Health Care Program in 1996.

As pointed out by Kennie (1993), the promotion of health education aims at engendering healthy behaviors and lifestyles. In case of health professionals, its purpose is to increase their awareness and include health promotional strategies in their daily work, and also to increase their counseling skills. Its further aim is to ensure that they display and promote appropriate health educational materials in the facilities over which they have control, which in this case, are the community health centers.

This paper is based on a study which was conducted for increasing an understanding of the health information, relevant to the elderly people, needed by health professionals, in relation to their role in providing services and advice.

Aim and Study Objectives

The overall aim of the study was to identify the needs of health professionals in terms of relevant information for providing health care in the community health centers to the elderly. More specifically, the study objectives were:

To assess the usefulness and relevance of the information which had been provided by the Ministry of Health for use in community health centers;

To identify the relevant and necessary information needs of health professionals involved in the care of the elderly in community health centers; and

To identify any gaps or deficiencies in terms of information needs of health professionals working for providing advice to the elderly, regarding their care in community health centers.

Methodology

To attain the above objectives, a draft questionnaire was piloted through face-to-face interviews with 20 health professionals (i.e. ten doctors and ten nurses) working in ten community health centers. Resultantly it was subjected

to various revisions. After government clearance, the revised questionnaires were sent, through the Regional Health Services Office by post to those working in community health centers. Participants were assured of the confidentiality of their responses, and their names were not recorded on the questionnaires.

All the subjects in the study were health professionals working in the 35 community health centers involved in the Elderly Health Care Program in Jakarta. In every community health center, there are usually three health professionals - one doctor and two health care workers such as a nurse, mid-wife or other health care personnel - involved in the program. Therefore, for the purposes of this study, a total of 105 questionnaires were administered to 35 doctors and 70 health care workers.

Questions, covering both open-ended and closed formats, were grouped into four sections:

1. Information about health professionals' roles;
2. Health professionals' information needs;
3. Assessment of the existing health information leaflets; and
4. Other information.

A total of seven leaflets were in use at the time of the study, and these are described in Section 2.

Of the 105 questionnaires sent out, completed postal responses from 28 community health centers representing 84 participants were finally obtained following reminders. This represents an overall response rate of 80 percent.

Data analysis mainly consisted of analysing the frequency of responses, coded as necessary, with some cross tabulations being performed, e.g. comparing responses from doctors with those of other health care workers. Whilst the information needs of these two groups might be expected to be different, knowledge of specific differences is of relevance for targetting the educational activities better.

Results

Comparing the information from the questions related to the use of community health centers by the elderly and other populations, it was estimated that the overall utilisation

rate was about 60 percent. This reinforces the importance of the role played by such centers in the provision of health services and health education to the elderly.

A vast majority (92 percent) of the 84 respondents were females. Of the 28 doctors, only five were males. Similarly, only two of the 56 other health professionals were males. All, but one, of the other health professionals were mid-wives or nurses (the exception being a nutritionist).

A majority of the respondents were in the 40 - 49 years age group (57 percent), with less than 10 percent being 50 years or above. Almost half the respondents (46 percent) had between 3 and 6 years' experience working with the Elderly Health Care Program.

1. Information needs

The perceived needs of health professionals in relation to their patients, in terms of written information, are detailed in their order of frequency in Table 1. The health problems identified (by at least 60 percent of the respondents) as most in need of written information were hypertension, arthritis, heart disease and gastric disorders. A moderate need (i.e. at least 40 percent of the respondents) for written information was identified in the areas of vision, neurological problems, activities of daily living, and hearing.

Table 1 Written Information Needs

Health Problem	Absolutely need (percent)	Some need (percent)	Absolutely no need (%)
Hypertension*	78.6	21.4	-
Arthritis*	73.8	26.2	-
Heart disease	66.7	33.3	-
Gastric disorder	63.1	36.9	-
Vision	53.6	46.4	-
Neurological	45.2	48.8	6.0
Activities of daily living	44.0	51.2	4.8
Hearing*	41.7	56.0	2.3
Asthma	39.3	60.7	-
Psychiatric/Psychological	39.3	57.1	3.6
Allergy	35.7	64.3	-
Tuberculosis	25.0	71.4	3.6
Dental	23.8	71.4	4.8
Urinary tract*	20.2	76.2	3.6
Reproductive system (females)	17.9	71.4	10.7
Reproductive system (males)	15.5	71.4	13.1
Sexual	15.5	75.0	9.5

* χ^2 between doctors and other health care workers, $P < 0.05$.

A significant difference ($p < 0.05$) was found between the perceived written information needs of the doctors and those of the other health care workers, as regards hypertension, arthritis, hearing problems and urinary tract ailments. A higher proportion of doctors indicated an "absolute need" for written information on hypertension and arthritis than other health care workers, whereas a higher proportion of other health care workers stated an "absolute need" for written information on hearing problems and urinary tract ailments.

The health problems for which the elderly visited the community health centers most frequently included hypertension, gastric disorders, arthritis and problems of vision. Visits for neurological and dental problems were of moderate frequency. Those for problems related to allergy, heart disease, asthma, activities of daily living, tuberculosis, hearing, psychiatric/ psychological doctors, the urinary tract, the female reproductive system and the male reproductive system were less frequent (Table 2).

Table 2 Visit Frequency of the Elderly to Community Health Centers for Particular Health Problems

Health Problem	Frequently (percent)	Occasionally (percent)	Never (percent)
Hypertension*	89.2	10.8	-
Gastric disorder	78.6	20.2	1.6
Arthritis*	69.0	21.4	9.5
Vision	61.9	38.1	-
Neurological*	53.6	33.3	13.1
Dental	44.0	50.0	6.0
Allergy	35.7	58.3	6.0
Heart disease	33.3	64.3	2.4
Asthma	32.1	63.1	4.8
Activities of daily living	23.8	57.1	19.1
Tuberculosis	22.6	58.3	19.1
Hearing*	20.2	69.0	10.8
Psychiatric/Psychological	19.0	66.7	14.3
Urinary tract	3.6	79.8	16.6
Reproductive system (females)*	1.2	59.5	39.3
Reproductive system (males)*	-	51.2	48.8
Sexual	-	45.2	54.8

* χ^2 between doctors and other health care workers, $p < 0.05$

Doctors and other health care workers differed significantly ($p < 0.05$) in their responses regarding visits for hypertension, arthritis, neurological and hearing problems and female and male reproductive system disorders.

While a higher proportion of doctors than other health care workers indicated that the elderly visited them frequently for hypertension, arthritis and neurological problems, a higher proportion of other health care workers reported that they visited the centers frequently because of problems of hearing and of the female reproductive system. A vast majority of doctors stated that they saw elderly patients with problems of hearing or of the female reproductive system occasionally. Although 75 percent of the doctors indicated that elderly males visited them occasionally for reproductive system problems, 61 percent of the other health care workers stated that no elderly males with such problems had visited the centers.

2. Assessment of health information leaflets

The respondents were asked to assess all of the seven health information leaflets then being used as part of the Elderly Health Care Program in community health centers. Their assessment of each leaflet was based on its usefulness and any perceived deficiencies or gaps in terms of its content and presentation.

The English titles of the leaflets are:

1. Health Problems of Elderly People.
2. Ten Tips that Elderly People Should be Aware of.
3. The Family Role in Preparing Food for Elderly People.
4. Seventeen Roles of the Family Concerning Elderly People.
5. Exercise for Elderly People .
6. Disease Prevention and Health Improvement for Elderly People.
7. Elderly Health Care Guidance.

A preliminary question elicited information on whether the health information leaflets produced by the Department of Health had in fact reached the community health centers. Nearly three-quarters (73 percent) of the respondents answered that they had seen all of the seven leaflets in their community health centers.

All of the 84 respondents had read the leaflets, and they stated that they had read at least some of the information contained within, with a vast majority of them having read most of the information. With only one or two exceptions, all the respondents who had previously read the leaflets believed that they were all easy to understand. The very

small proportion of the respondents who stated that the leaflets were not easy to understand, cited either "too much information" or "too small a font" as the main reasons.

A vast majority of the respondents reported that each of the seven leaflets reviewed met their written health information needs, although, as regards the leaflet, "Health Problems of Elderly People" as many as 17 percent indicated that the written information was inadequate. Additional topics that were also considered important for being included in this leaflet, included arthritis, vision impairment, hearing impairment and sexuality. Two respondents stated that the leaflet combined too many topics together and that it would have been better if each elderly health problem topic was covered under a separate leaflet. A variety of comments and suggestions were made relating to the other leaflets.

The respondents were asked for general comments on each of the leaflets. The most common recommendations were changing the format by using a bigger font, using attractive colours and producing leaflets aimed at the elderly themselves.

In order to identify any gaps in the information needs of the health professionals in the community health centers, the respondents were asked about other health information topics related to elderly people, which could be of benefit if produced in the form of leaflets. Of the 84 respondents, 50 (60 percent) gave one or more suggestions, in which the most common topics mentioned were: arthritis (n=24), psychology/ psychiatry (n=22), hypertension (n=14) and heart disease (n=9).

Finally, the respondents were given an opportunity to make any further comments. Of the 84 respondents, 39 (46 percent) provided such comments on issues regarding the health of the elderly. Their most frequent comments included :

1. A strong need to produce leaflets specifically for the elderly themselves;
2. Concern about the importance which the government attaches to continuation of funding the Elderly Health Care Program in the community health centers; and
3. Provision of training for the elderly in profit-making activities which could be useful for them in terms of income generation.

Discussion

Ewan (1990:576-587) stated that an aging population is a world-wide phenomenon which increases the need for health professionals and the community in general providing support for the elderly who have diverse chronic illness and mobility problems. In addition, Ewan (1990:576-587) stated that there is a need to enhance the knowledge and skills of health professionals to enable them to deal effectively with the problems of the elderly.

The general aim of the study presented in this paper was to identify the needs of health professionals in terms of relevant information for providing health care to the elderly in community health centers in Indonesia.

In relation to the first objective of the study, i.e. the usefulness and relevance of the existing information, a majority of the health professionals who had read the information contained in the leaflets stated that this was appropriate and easy to understand. The study has, therefore, shown that the leaflets produced by the Ministry of Health are generally useful for the health professionals working in community health centers. However, a small proportion commented that the information leaflets should be revised and updated in terms of information content, pictures, colours, lay-out, type-styles and type-size. Also, in the opinion of the health professionals, some information in the leaflets was inaccurate, and this could lead to inconsistency in the advice provided by different health professionals.

The relevant and necessary information needs of health professionals were examined in accordance with the second study objective. A vast majority of the respondents stated that each of the leaflets reviewed met their needs in the areas they covered. However, in terms of identifying gaps or deficiencies (the third study objective), a majority of the health professionals (at least 60 percent) stated that pertinent information on health problems related to hypertension, arthritis and heart disease needed to be added. Some comments (at least 40 percent of the respondents) also called for information on other health issues such as gastric disorders, vision problems, psychology/psychiatry disorders, type of diet for the elderly, hearing impairment, neurology, activities of daily living and sex related problems. Results of household surveys on health conducted in 1980, 1986

and 1992 indicated that the most common health problems affecting the elderly were arthritis, hypertension and cardiovascular disease (Syahbudin 1990; Darmojo 1992; Central Bureau of Statistics and National Institute of Health Research and Development 1992).

With reference to the health professionals' information needs on the health problems stated above, the study identified the differences between the perceptions of the doctors and other health care workers. A larger proportion of doctors as against other health care workers stated that there was an "absolute need" for information on health problems relating to hypertension (93 percent versus 71 percent) and arthritis (89 percent versus 66 percent). On the other hand, other health care workers expressed more often an "absolute need" in the areas of urinary tract (27 percent versus 7 percent) and hearing problems (52 percent versus 21 percent).

As regards how often elderly people visited community health centers for particular health problems, the responses from most health professionals (60 percent) stated this was due to health problems particularly related to hypertension, gastric disorders, arthritis or vision problems, followed by a moderate frequency of visits relating to neurological or dental problems. The reasons for the elderly people's visits to doctors in the community health centers were most often related to hypertension, arthritis and neurological problems. On the other hand, other health care workers reported hearing and female reproductive system problems as the more frequent reasons for the elderly visiting them.

Based on the above results, it can be inferred that the most common issues concerning the health problems of the elderly are those of hypertension and arthritis. This is true both in terms of why elderly people visit the community health centers, and also the perceived information needs of health professionals.

The overall opinion expressed by the health professionals was that the information leaflets, in general, were good. However, some gaps existed between the information provided by the Ministry of Health and the information needs as perceived by health professionals working in community health centers for providing health care to the elderly. Such gaps or deficiencies may be lessened by effective pre-testing of the prepared information materials

with the target groups before their production and distribution (Ewles and Simnett 1985).

Recommendations

To ensure appropriate information is provided to meet the needs and improve the skills and knowledge of health professionals working in community health centers in Indonesia, the following recommendations are made :

The Ministry of Health should:

- try written information on the target audience before producing the final version;
- review and assess such information as to its current usefulness and accuracy as perceived by health professionals, as part of routine annual visits to community health centers;
- improve the knowledge and skills of health professionals in the community health centers through training and/or short courses, to be conducted by the regional health office;
- develop educational resources such as a quarterly bulletin, to provide updated and recent information about the elderly and their health problems;
- produce leaflets aimed at the elderly themselves, in order to develop their knowledge and understanding of the problems to be addressed; and
- undertake similar research with health professionals working in community health centers in other provinces, as the present research has covered only Jakarta.

References

- Andrews, GR. 1994. The challenge of ageing: an international perspective. Pp7-11 in *Future Directions in Aged Care in Indonesia*, ed. G Hugo. Adelaide : University of Adelaide.
- Central Bureau of Statistics and National Institute of Health Research and Development. 1992. *Household Survey on Health 1992*, Indonesia.
- Darmojo, B. 1992. *Pola Penyakit Pada Usia Lanjut*, Direktorat Bina Kesehatan Keluarga, Departemen Kesehatan, Indonesia.
- Darmojo, B, H Martono, T Suhartono, Suharyo and WS Hertanto. 1994. *Penelitian Kesehatan Dan Keadaan Sosial Golongan Usia Lanjut*, Perumusan Hasil temu Kerja Penyusunan Konsep Pembinaan & Pelayanan Usia Lanjut Di Rumah Sakit.
- Ewan, C. 1990. Educating health professionals in the care of the elderly. Pp 576-587 in *Improving the Health of Older People: A World View*, ed. RL Kane, JG Evans and D Macfayden. Oxford University Press.
- Ewles, L and I Simnett. 1985. *Promoting Health: A Practical Guide to Health*

- Education*. Singapore : John Wiley & Sons.
- Gunawan, N. 1994. Initiative in aged care in Indonesia: preparing ourselves for the ageing process and the extent of public responsibility. Pp 74-80 in *Future Directions in Aged Care in Indonesia*, ed. G Hugo. Adelaide : University of Adelaide.
- Hardywinoto. 1994. *Penatalaksanaan Pelayanan Kesehatan Usia Lanjut Di Daerah Khusus Ibukota Jakarta Tahun 1992-1993*, Dinas Kesehatan DKI Jakarta.
- Hugo, G. 1991. Aging: 'A New Challenge for Indonesia'. *Aging International* 18 (2).
- Kennie, DC. 1993. *Preventive Care For Elderly People*. Great Britain : Cambridge University Press.
- Macfayden, D. 1990. International demographic trends. Pp 19-29 in *Improving the Health of Older People: A World View*, ed. L Robert, J Kane, G Evans and D Macfayden. The World Health Organization, Oxford University Press.
- Ministry of Health. 1990. *Challenges Towards Attainment of FHA/2000 in Indonesia*. Republic of Indonesia.
- Ministry of Health. 1991. *The Fifth Five Years Development Plan Period of Health*. Bureau of Planning, Republic of Indonesia.
- Smith, JP. 1994. Measuring health and economic status of older adults in developing countries. *The Gerontologist*, 34(4) : 491-496.
- Syhabuddin, II. 1990. *A Five Year Plan to Reduce Morbidity from Cardiovascular Disease among the Elderly in Indonesia 1990-1994*. Faculty of Public Health, Mahidol University.