Research Article

Treatment-seeking behavior of elderly in Haryana: an evaluation study

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Abstract

Background: The proportion of the elderly population is gradually increasing in India. Hence, the need for the geriatric health-care services is on demand. For such services, the treatment-seeking behavior with associated reasons needs to be assessed.

Objectives: To ascertain the treatment-seeking behavior of the elderly people in Haryana.

Materials and Methods: A community-based, cross-sectional study was conducted on the elderly of Haryana with the help of semi-structured interview schedule. Total sample size of 400 consenting elderly people from the eight selected areas (four rural and four urban) of Haryana was considered for this objective.

Results: The study showed that availability and effectiveness are the main reasons behind the choice of therapy and resource. Allopathy was the preferred therapy, and owing to the availability factor, quacks were approached as the first choice, who were later replaced by allopathic doctors (MBBS) in the third stage of health-care resource choice.

Conclusion: Allopathy remains as the top choice of therapy, followed by ayurveda. Immediate availability of quacks is the major factor for their choice as first health-care resources.

KEY WORDS: Elderly, treatment-seeking behavior, Haryana

Introduction

Twenty-first century is witnessing a gradual transition to an aging society all over the world.[1] India has acquired the label of an aging nation with 7.7% of its population being older than 60 years. There has been a sharp increase in the proportion of elderly population in India as a result of demographic transition.[2]

According to Census 2011, the number of elderly in India was 103,836,714. On the basis of three age-wise categories, namely young old (60–69 years), old old (70–79 years), and oldest old (80 years and older), the percentages were 62%, 27%, and 11%, respectively. This signifies that with the passage of time, the number of elderly will increase.[3] According to official population projections, the number of elderly persons will rise to approximately 140 million by 2021.[4]

With an aging population, the number of diseases related to elderly people also increases. From the morbidity point of view, at least 50% of the elderly in India have chronic diseases. This poses a greater responsibility on the health-care services, especially in developing countries such as India, where there is a greater strain on available health infrastructure.[5,6] Owing to increase in the geriatric-specific disease conditions, geriatrics is emerging as a major medical specialty all over the world. In India too, the last decade has projected a significantly rising rate of aging population, and, hence, a great need was felt to know about the health-seeking behavior of the elderly. This study was conducted with the objective ascertaining the treatment-seeking behavior of the elderly people in Haryana.

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Materials and Methods

This community-based, cross-sectional study was conducted on the elderly of Haryana with the help of a semi-structured interview schedule. The total sample size of

400 consenting elderly people from the eight selected areas (four rural and four urban) of Haryana was considered for this objective. To be on a safer side, a sample size of 400 was considered. For this, one district from each division of Haryana, that is, Yamuna Nagar from Ambala division, Mewat from Gurgaon division, Sirsa from Hissar division, and Rohtak from Rohtak division, was included in this survey. From each selected district, one urban and one rural area were selected on the basis of lottery methods (random sampling). The sample size of 400 was calculated using the formula[7]:

$$n = \frac{t^2PQ}{2}$$

where n is the sample size; t the value of t-test at 95% confidence level (at $P < 0.05$) = 1.96; P the assumption that 50% subjects (elderly population) have used ayurvedic regimes for geriatric health care = 0.50; $Q = 1 - P = 0.50$; d the margin of error at 5% = 0.05.

Now when we substitute the values in the formula, we get: $n = 1.96^2 \times 0.50 \times 0.50/0.05^2 = 384$ (at $\alpha = 0.05$ and $\beta = 0.20$).

To choose the area-wise sample size, a proportionate sampling technique was used. Sample size was distributed on the basis of latest available population census[8] of elderly in the district and in the rural and urban areas.

- Rohtak: Rural, 55,309/80,455 = 68.7 = 69; Urban, 25,146/80,455 = 31.3 = 31
- Sirsa: Rural, 65,245/84,474 = 77.2 = 77; Urban, 19,229/84,474 = 22.8 = 23
- Yamuna Nagar: Rural, 54,266/83,944 = 64.6 = 65; Urban, 29,728/83,944 = 35.4 = 35

For Mewat district, sample size was distributed on the basis of latest available census of elderly in the rural and urban areas of Haryana:

- Haryana: Rural, 1,192,000/1,584,000 = 75.25 = 75; Urban, 392,000/1,584,000 = 24.74 = 25
- Mewat: Rural = 75; Urban = 25

On the basis of this distribution, 75 elderly were covered from rural area and 25 elderly from the urban area of Mewat district. After the selection of area-wise sample, the consenting and available elderly people were considered on the basis of random sampling from each selected areas. Data were collected as a part of PhD study by the research scholar (first author) between the periods of October 16, 2012, and May 31, 2014.

Statistical Analysis

The data analysis was done with the help of Microsoft Excel 2007 and SPSS, version 16.

Results

Majority (263; 66%) of elderly were aged 60–69 years, followed by 70–79 years (91; 23%) and 80 years and older (46; 11%). Overall, 180 (130 rural + 50 urban) were women and 220 (156 rural + 64 urban) were men. Approximately two-third of the respondents were married (283 = 174 men + 109 women); 12 were single (11 men + 1 woman), 70 widows, and 35 widowers. Majority of respondents were Hindu (267 = 145 men + 122 women), followed by Muslim and Sikh, that is, 93 (50 men + 43 women) and 40 (25 men + 15 women), respectively. Majority of the respondents were illiterate (237 = 142 women + 96 men) and nonworking (253 = 118 women + 135 men). Most of the women were housewives, and most of the working elderly were farmers or shopkeepers. The trend observed in the choice of therapy and health-care resources is given in Tables 1–4.

First Choice

Therapy

Of 400 respondents, 367 chose Allopathy and 33 preferred Ayurveda as the first treatment modality. Of the total respondents, 230 chose their respective first line of treatment as they considered it to be effective based on their previous experience and believed that it surely relieved their trouble. This was followed by the reason of its availability in government health-care facilities, as was responded by 136 elderly people. Other reasons given for the choice of therapy were that it was prescribed by the doctor or chemist, its free-of-cost availability, and it being advised by a family member.

Health-Care Resource

A majority (241) of the respondents went to quacks as their first choice for the treatment of their illness, followed by Allopathic doctors (68), chemists (46), and Ayurvedic doctors (23). Self-medication was preferred as the first choice by 14 respondents, followed by traditional healers (5) and Homoeopathic doctor (1). Majority (311) of the respondents gave availability of a health-care resource as the reason for their first choice of the same.

Second Choice

Therapy

Of 400 respondents, 227 chose Allopathic treatment and 27 chose Ayurvedic treatment for the second time; 146 elderly did not give any response for their second choice of treatment, whereas 135 respondents chose their respective second line of treatment as they considered it to be effective, followed by its ease of availability (81), free-of-cost availability (10), and prescribed by doctor/person (15). Moreover, 11 respondents went for a different choice from the first therapy because of its none-ffectiveness/failure.

Health-Care Resource

Of 400 elderly interviewed, 152 chose Allopathic doctors (MBBS) as their second choice of health-care resource, followed by quacks with 58 respondents. Ayurvedic doctors (BAMS) were the second choice of health-care resource for 23 respondents, followed by 15 for chemists and 4 for traditional healers. Of 400 respondents, 112 made their choice for a second health-care resource because of its availability, followed by dissatisfaction from first health-care resource (90).

Table 1: Treatment choice of elderly (n = 400)

Components (No. of elderly)	First choice of treatment		Second choice of treatment			Third choice of treatment		
	Allopathic (367)	Ayurvedic (33)	Allopathic (227)	Ayurvedic (27)	No response (146)	Allopathic (19)	Ayurvedic (3)	No response (378)
Sex								
Female (180)	164	16	103	10	66	7	0	173
Male (220)	203	17	124	16	80	12	3	205
Residence area								
Rural (286)	255	31	159	21	105	14	3	269
Urban (114)	112	2	68	5	41	5	0	109
Religion								
Hindu (267)	252	15	166	12	89	13	1	253
Muslim (93)	77	16	42	15	36	6	2	85
Sikh (40)	38	2	19	0	21	0	0	40
Educational qualification								
Graduate (10)	9	1	3	2	5	0	0	10
High (19)	18	1	10	1	8	2	0	17
Intermediate (10)	10	0	5	1	4	1	0	9
Middle (39)	37	2	18	5	16	1	0	38
Primary (85)	78	7	51	4	30	3	1	81
Illiterate (237)	215	22	140	14	83	12	2	223

Table 2: Reasons for treatment choice of elderly (n = 400)

Reason for treatment choice (No. of elderly)	Sex		Residence area		Religion			Educational qualification					
	Female (180)	Male (220)	Rural (286)	Urban (114)	Hindu (267)	Muslim (93)	Sikh (40)	Graduate (10)	High (19)	Inter-mediate (10)	Middle (39)	Primary (85)	Illiterate (237)
First treatment													
Effective (230)	109	121	170	60	160	56	14	5	8	5	16	52	144
Availability (136)	58	78	84	52	87	24	25	5	7	4	20	31	69
Prescribed by doctor/chemist (22)	5	17	20	2	19	2	1	0	4	1	3	1	13
Free (11)	7	4	11	0	0	11	0	0	0	0	0	1	10
Recommended by family member (1)	1	0	1	0	1	0	0	0	0	0	0	0	1
Second treatment													
Effectiveness (135)	66	68	101	33	102	32	3	0	3	2	10	27	93
Availability (81)	30	50	46	36	60	7	14	4	4	3	8	25	37
Free availability (15)	6	9	15	0	0	13	0	0	0	0	2	3	10
Noneffectiveness/failure of first chosen therapy (10)	7	3	9	1	5	5	0	0	1	0	0	0	9
Prescribed by doctor/chemist (10)	4	8	10	0	10	0	0	0	3	0	2	0	5
Need of specialized care (3)	1	2	0	3	1	0	2	1	0	1	1	0	0
No response (146)	66	80	105	41	89	36	21	5	8	4	16	30	83
Third treatment													
Effectiveness (13)	4	9	10	3	8	5	0	0	1	0	0	3	9
Noneffectiveness/failure of second therapy (4)	3	1	4	0	3	1	0	0	1	0	0	0	3
Availability (3)	0	3	1	2	3	0	0	0	0	1	1	0	1
Free (2)	0	2	2	0	0	2	0	0	0	0	0	1	1
No response (378)	173	205	269	109	253	85	40	10	17	9	38	81	223

Table 3: Health-care resource choices of elderly (n = 400)

Health-care resource choice (No. elderly)	Sex		Residence area		Religion			Educational qualification					
	Female (180)	Male (220)	Rural (286)	Urban (114)	Hindu (267)	Muslim (93)	Sikh (40)	Graduate (10)	High (19)	Intermediate (10)	Middle (39)	Primary (85)	Illiterate (237)
First													
Quack (241)	114	127	175	66	156	62	23	3	10	1	25	56	146
Allopathic doctor (68)	26	42	42	26	44	11	13	3	4	4	10	12	35
Chemist (46)	18	28	29	17	45	0	1	0	4	5	1	8	28
Ayurvedic doctor (23)	13	10	21	2	4	19	0	2	0	0	0	1	20
Self-medication (14)	6	8	12	2	11	0	3	2	1	0	2	2	7
Traditional healer (7)	3	4	6	1	6	1	0	0	0	0	1	5	1
Homoeopathic doctor (1)	0	1	1	0	1	0	0	0	0	0	0	1	0
Second													
Allopathic doctor (152)	68	84	109	43	105	28	19	3	7	1	15	37	89
Quack (58)	27	31	48	10	43	14	1	1	2	3	1	8	43
Ayurvedic doctor (23)	8	15	18	5	7	16	0	2	1	0	3	5	12
Chemist (15)	6	9	2	13	15	0	0	0	1	2	2	4	6
Traditional healer (4)	3	1	4	0	4	0	0	0	0	0	1	0	3
No response (148)	68	80	105	43	93	35	20	4	8	4	17	31	84
Third													
Allopathic doctor (20)	7	13	15	5	14	6	0	0	2	1	1	3	13
Ayurvedic doctor (2)	0	2	2	0	0	2	0	0	0	0	0	1	1
No response (378)	173	205	269	109	253	85	40	10	17	9	38	81	223

Table 4: Reasons for the health-care resource choice of elderly (n = 400)

Reason for health-care resource choice (No. elderly)	Sex		Residence area		Religion			Educational qualification					
	Female (180)	Male (220)	Rural (286)	Urban (114)	Hindu (267)	Muslim (93)	Sikh (40)	Graduate (10)	High (19)	Intermediate (10)	Middle (39)	Primary (85)	Illiterate (237)
First resource													
Availability (311)	141	170	231	80	212	76	23	4	14	5	30	60	198
Availability and cheap cost (20)	9	11	8	12	10	9	1	0	1	1	3	6	9
Effectiveness (16)	9	7	14	2	12	0	4	0	2	1	1	7	5
Specialized care (16)	5	11	7	9	6	3	7	3	1	3	2	2	5
Cheapest (9)	5	4	5	4	4	5	0	0	0	0	1	1	7
Relative (9)	2	7	6	3	9	0	0	2	0	0	0	4	3
Recommended by known (7)	3	4	7	0	6	0	1	0	0	0	0	3	4
Family tradition (6)	2	4	4	2	3	0	3	1	0	0	2	1	2
Home service (5)	4	1	3	2	4	0	1	0	0	0	0	1	4
TV advertisement (1)	0	1	1	0	1	0	0	0	1	0	0	0	0
Second resource													
Availability (112)	51	61	83	29	73	34	5	1	6	5	5	21	74
Dissatisfaction with first health-care resource (90)	45	45	61	29	58	22	10	1	0	1	7	26	55
Specific/specialized care (29)	13	16	22	7	25	0	4	2	3	0	5	6	13
Effectiveness (6)	1	5	5	1	5	0	1	0	2	0	0	0	4
Known (5)	1	4	2	3	5	0	0	2	0	0	2	0	1
Referral by doctor/relative (4)	1	3	3	1	2	2	0	0	0	0	1	0	3
Cheap (3)	1	2	1	2	3	0	0	0	0	0	1	0	2
Branding/status (3)	0	3	3	0	3	0	0	0	0	0	1	1	1
No response (148)	67	81	106	42	93	35	20	4	8	4	17	31	84
Third resource													
Dissatisfaction with second health-care resource (17)	5	12	12	5	11	6	0	0	1	1	1	3	11
Availability (2)	0	2	2	0	0	2	0	0	0	0	0	1	1
Effectiveness (1)	0	1	1	0	1	0	0	0	1	0	0	0	0
Referral by relative (1)	1	0	1	0	1	0	0	0	0	0	0	0	1
Specialized care (1)	1	0	1	0	1	0	0	0	0	0	0	0	1
No response (378)	173	205	269	109	253	85	40	10	17	9	38	81	223

Third Choice

Therapy

Allopathy and Ayurveda were chosen as the third choice of treatment by 19 and 3 respondents, respectively; 378 respondents did not respond for this choice. Thirteen respondents chose their respective third therapy because of its effectiveness, followed by dissatisfaction from the second therapy with four respondents.

Health-Care Resource

Allopathic doctors (MBBS) were the choice of health-care resource for 20 respondents, whereas for 2, it was Ayurvedic doctors (BAMS). Majority of the respondents (17) chose a third health-care resource because of dissatisfaction from their second health-care resource, followed by the availability of this resource (2 respondents). Other reasons were effectiveness and referral by a relative.

Discussion

The majority of the elderly were aged 60–69 years in this study. This scenario suggests that with the passage of time the problems of the elderly will increase; 63% elderly were not working in our study area, whereas in the study conducted by Bhatt *et al*.[6] in Gujarat (India), same status was reported for 52% of the elderly. It indicates that a major portion of elderly were financially dependent on other family members.

The selection of quacks as health-care resource by the majority of the elderly indicates the importance of the availability factor for utilization of any services. As pointed out by respondents, it is the availability that attributes more toward the first choice. This is because most of the respondents were from the rural areas and that the scarcity of the qualified medical practitioners in these areas is pointed out by many national and international reports.

The findings of this study suggest that most of the quacks were practicing Allopathy, which was evident from the response of elderly for first therapy and health-care resource choice. The therapy was chosen mostly on the basis of effectiveness and availability; however, the availability was the major contributor for selection of health-care resource by the elderly. Trend of sale of over-the-counter drug by the chemist directly to the patient also attribute toward the common use of allopathic drugs among the elderly.

The leading choice of therapy remains the same throughout all the three stages, that is, Allopathy. However, in the case of health resource choice, when it comes to second and third choices of health-care resource, the Allopathic doctor was chosen by a majority of respondents. The most attributed reason behind this change of choice was the dissatisfaction from the previously chosen health-care resource. This indicates that, ultimately, it is the effectiveness that affects the selection of final therapy and health-care resources. However, this change in attributed factor from availability to effectiveness in the final stage points out the casual attitude of the elderly towards their health.

Conclusion

Allopathy remains the top choice of therapy, followed by Ayurveda. Immediate availability of quacks is the major factor for their choice as first health-care resources.

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