

Determining Older People's Health Needs



**HelpAge
International**

age helps

Determining Older People's Health Needs

A research study on the health needs of older people
in the Thar Desert, India



EUROPEAN UNION



GRAVIS



HELPAge INTERNATIONAL

Determining Older People's Health Needs

2013

GRAVIS

Written & Edited by
Prakash Tyagi

Preliminary concept and design
Robert Wallace

Research and fieldwork
Lia Garman, Arpit Singhvi and Eva Schmitt

Organized by
GRAVIS
3/437, M. M. Colony
Pal Road, Jodhpur 342008, INDIA
Phones - +91 291 2785116, 2785317
Fax - +91 291 2785116
www.gravis.org.in

and

Help Age International, UK

Supported by
The European Union

© GRAVIS

ISBN 978-81-966767-7-3

CONTENTS

	Pg.
I	Introduction
	7-15
	A. Ageing trends at the global level
	7
	B. Ageing in India
	10
	C. Rajasthan and the Thar Desert Scene
	12
	D. Background
	13
	E. Aims and Objectives of the study
	15
	F. Scope of study
	15
II	Methodology
	16-17
	A. Evaluation tools used
	16
	B. Phases of the study
	16
	1. Preparatory phase
	16
	2. Data collection phase
	16
	3. Compilation and consolidation phase
	17
	C. Ethical Considerations
	17
III	Research Findings
	18-39
	A. General information on the community
	18
	B. Focus group discussions and HRqL survey findings
	19
	C. Caretaker assessment
	32
	D. Results of physical exams
	36
	E. Conclusion of findings
	38
IV	Good practices: case studies
	40-42
V	Guest article: old age and oral health
	43-47
VI	Recommendations
	48-50
VII	Abbreviations
	51

FOREWORD

Older People's health needs have remained unattended and less prioritized over a long period of time in many parts of the world, especially in the developing world and in low and middle income countries. With the growing life expectancy the life span has been increasing, and thus the numbers of older people are increasing. We are looking at a 2 billion older people population by 2050 out of a total 9 billion global population.

A need of studying older people's health needs was being felt for some time. Help Age International and GRAVIS, as organizations working actively on ageing, took up the task of understanding these issues under the EU funded POC project in the Thar Desert of India. The study assesses older people's health needs and perceptions through a socio-economic angle, with the views of older people, their care-givers and health practitioners, and with the help of medical insights and physical exams. Therefore, the assessment has been quite comprehensive and comes up with a good summary of findings leading to a set of recommendations at the levels of policy and implementation. A number of tools including Health Related Quality of Life Survey, caretakers' assessments, physical exams of older people, Focus Group Discussions with older people, desk review of existing literature and expert level discussions have been used in the study. The study covered 12 remote villages of the Thar Desert.

We envisage the outcomes of the study being of help to the governments and non-governmental organizations in planning, implementation and monitoring of effective healthcare programmes focusing on ageing.

The study would not have been possible without the important contributions of Robert Wallace, Lia Garman, Arpit Singhvi, Eva Schmitt and GRAVIS field and medical teams. The funding support from the EU and the technical guidance from Help Age International were of great value and are deeply appreciated. Last but not the least, a special word of gratitude goes to the Older People of the Thar Desert who participated actively in the study.

Prakash Tyagi

Executive Director

1. INTRODUCTION

A. Ageing trends at the global level

One of the most remarkable phenomena of the past century, which continues further in the twenty-first century, is global ageing. Significant advances in medical techniques, improvement in public health systems and socio-economic development have resulted in a marked increase in the life span and consequently improvement in average life expectancy all across the globe. While this improvement is significantly noteworthy in the developed world, the developing countries have also shown very steady progress in this context. A person born in 1950 could expect to live for 46 years; a person born in 2000 can expect to live for 65 years and come 2050, the life-expectation will go to 76 years¹. The evidence of rapid and inexorable global ageing is firm and clear.

In 2000, there were about 600 million people aged 60 or over. By 2050, this figure is likely to touch the two-billion-mark². It is expected that in the next 45 years, the number of people older than 60 will be greater than the number of people younger than 15. This will happen for the first time in the history of mankind. Not surprisingly, most of the older people live in the developing world and the number of older people is increasing rapidly in developing countries. Currently, some 374 million older people live in the developing world accounting for 62% of global population of older people. This figure is likely to reach 67% by 2015³. A large number of older people in the developing world are impoverished. Poverty and material insecurity has been directly impacting health and well-being of older people.

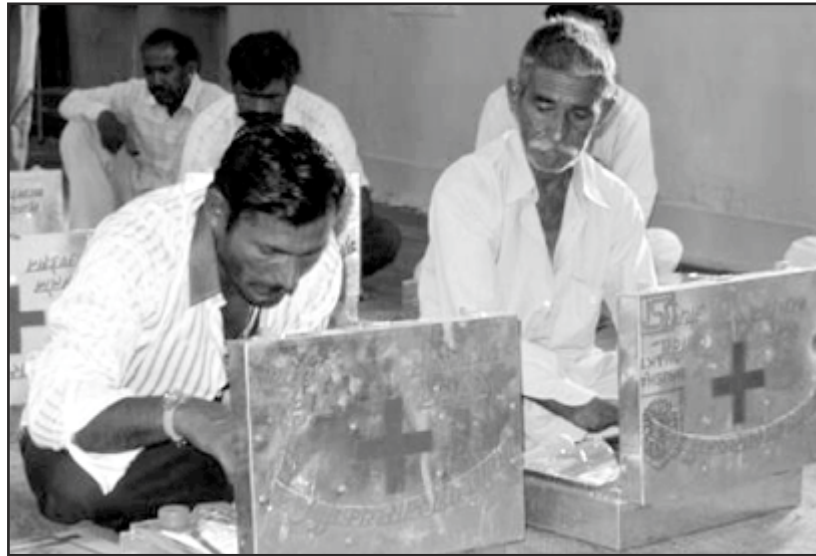
Of all the people who have ever lived to age 65, more than two thirds are currently alive⁴. The implications of these statistics are often viewed in demographic and economic terms, but it also has significant relevance to issues related to medical care and public health. Past experiences reveal that the situation of healthcare provision in many parts of the world is not satisfactory. Population ageing is certainly one of the major triumphs of the developmental process all around the globe. However, maintaining a quality of life in the old age with adequate access to basic health care will be one of the most intriguing challenges in the years ahead.

¹ State of the world's older people 2002 : Help Age International

² Facts about ageing : WHO

³ Facts and figures – global ageing : Help Age International

⁴ Resnick NM - "Geriatric Medicine" - CMDT, (39th addition), 2000



A Health Training

As the global population rises, countries all over the world face the challenge of providing services and resources to more people. Growth can lead to major changes in population demographics, such as rapidly shifting age structures. One key demographic that is growing worldwide is older people. Major public health advances have led to declining fertility and increased life expectancies, causing older people to make up a larger share of the world's total population. Within the next five years, the number of adults aged 65 and over will outnumber children under the age of 5 for the first time in history. By 2050, these older adults will outnumber all children under the age of 14⁵.

Although developed countries have had decades to adjust to ageing trends, many developing countries are unprepared for a sharp increase in a demographic that often requires long-term medical care, financial support and assistance with daily activities. Still, low and middle-income countries will experience the most rapid and dramatic demographic change: by 2050, 80% of the world's older people will live in the developing world.

The lukewarm response from major international development organizations to this demographic shift has made it difficult for low-income countries to develop effective strategies. In recent years global health policy has largely focused on achieving the Millennium Development Goals, which make no mention of the health of older people. In fact, the needs of older people have either been excluded from or marginal to all the most prominent international health policy initiatives over the last 50 years⁶.

⁵"Interesting Facts About Ageing." Ageing and Life Course. World Health Organization, 28 Mar. 2012. Web.<<http://www.who.int/ageing/about/facts/en/index.html>>.

⁶Lloyd-Sherlock, Peter. "Epidemiological Change and Health Policy for Older People in Developing Countries: Some Preliminary Thoughts." *Ageing Horizons* 2 (2005): 21-24. Web.<<http://www.ageing.ox.ac.uk/files/AH%202%20Lloyd-Sherlock.pdf>>.



Elderly people enjoying Independence Day Celebrations of their grandchildren

QUICK FACTS ON GLOBAL AGEING

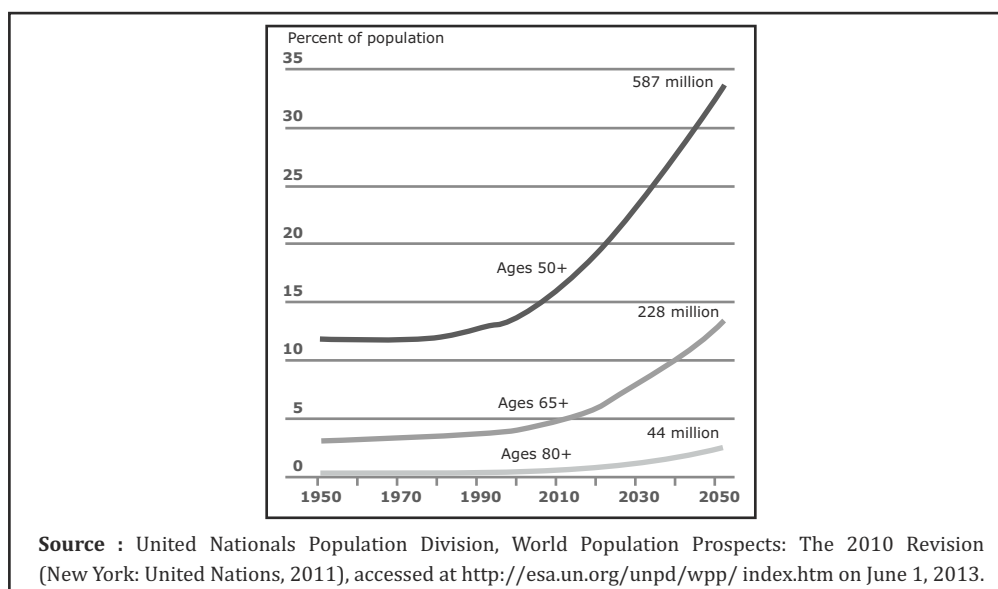
- ❖ Between 2000 and 2050, the proportion of the world's population over 60 years will double from about 11% to 22%. The absolute number of people aged 60 years and over is expected to increase from 605 million to 2 billion over the same period.
- ❖ The number of people aged 80 years will almost quadruple to 395 million between now and 2050. This is the first time in history that the majority of middle-aged adults had living parents.
- ❖ The number of older people who are no longer able to look after themselves in developing countries is forecast to quadruple by 2050.
- ❖ In developed and developing countries alike the biggest causes of mortality are heart disease, stroke and chronic lung disease.

Source : The World Health Organization, www.who.int.

B. Ageing in India

In India, leaps in life expectancy and declines in fertility have been particularly severe. Trailing only China, India is on track to have the world's second highest population of older people in the coming years. Currently at about 100 million, India's older people population is projected to reach 227 million by 2050.

The shift in age structure is accompanied by an epidemiological transition that is leaving more elderly people affected with chronic health conditions. As is the case in other developing countries, more Indians today are developing non-communicable diseases such as heart disease and hypertension due to a poor diet, lack of exercise and alcohol and tobacco consumption. Non-communicable diseases are already responsible for two-thirds of the total morbidity burden and about 53% of total deaths in India; a figure that has risen from 40.4% in 1990 and is expected to rise to 59% in 2015⁷.



Over the last twenty years, health policy in India has focused largely on maternal and child health with special emphasis on population control. However as ageing trends become more pronounced and rates of non-communicable diseases rise, the government is working to develop more measures to support older people and create more opportunities for them. Some of these include the National Policy on Older Persons (1999), the Maintenance of Parents and Senior Citizens Bill (2007), the National Programme for the Healthcare of the Elderly (2011), and several government schemes to provide monthly allowances of food or money. These programs have seen varying degrees in success across state borders.

⁷ World Health Organization. "Country Cooperation Strategy at a Glance: India." (2012)

Keeping NPOP and growing number of elderly persons in the country, the Government of India launched a much-needed National Programme for the HealthCare of the Elderly (NPHCE). The programme aims at providing accessible, affordable, and high-quality long-term, comprehensive and dedicated care services to an Ageing population⁸. The programme is new and yet to reach larger sections of the country.



Caring for other generations

In India the vast majority of older persons needing assistance receive it from their children and younger relatives. However as the population ages, older people will have a shrinking pool of working-age people to support them. This makes the need for old-age support from the government, private sector and NGOs all the more critical. The progress of current initiatives and plans for future efforts will be discussed more in later chapters.

⁸ <http://health.bih.nic.in/Docs/Guidelines/Guidelines-NPHCE.pdf>

C. Rajasthan and the Thar Desert scene

In a country with as much regional variation as India, it's important to remember that nation-wide statistics, though significant, should be only one of the many sources of information on ageing. Like every state, Rajasthan has unique demographic trends that are connected to climate, health infrastructure, the economy, politics, and culture. Between 2001 and 2011 the total population of Rajasthan rose by 21.3 percent, with a 19 percent increase in rural population⁹. Today about 75 percent of people in Rajasthan live in rural areas.

Life in rural Rajasthan is especially difficult for inhabitants due to limited resources and isolation. However for the more than 23 million people who call the Thar Desert their home, the harsh desert climate makes these issues even more prominent. Covering much of western Rajasthan, the Thar Desert sees an average of only 200 millimeters of rainfall, scorching temperatures and frequent dust storms. Medical facilities are few and far between, and many older people have to travel 50 kilometers or more to get the specialized treatment they need. Extreme water scarcity, limited diet options and economic opportunities, and distance from medical facilities make living conditions exceptionally difficult for older people. Conditions like poor eyesight and asthma are common.



Daily chores in the Thar like fetching water become a burden at an old age

⁹http://www.rajcensus.gov.in/PCA_2011_FINAL_DATA/PCA_2011_HIGHLIGHTS.pdf

D. Background

Of those in rural areas, the health of older populations is particularly at risk. Health policy is rooted in the provision of care to all but as it is embodied it seems to favor ensuring maternal and child health, controlling the spread of infectious and communicable diseases, and prevention of chronic conditions. Little if any attention has been given to older populations, their needs, or the particular challenges they face in receiving care.

These problems are nowhere more striking than in Rajasthan, one of the least developed states in India. Older people account for approximately 2 million of Rajasthan's population and are among the most vulnerable groups. In the Thar Desert of western Rajasthan conditions are particularly under-developed and older people are particularly susceptible to the problems of impoverishment, malnourishment, and isolation.



Improving nutrition by growing fruit

In the Thar, marginalization occurs on the basis of age, gender, and social status. The majority of older people are dependent on family members or neighbors for their daily water and food requirements. Where family members are migrating to cities or mining areas in search of better opportunities, older people are left behind with limited resources and in many areas there are few primary healthcare facilities, and no secondary or tertiary facilities. A lifetime of living in a region as harsh as the Thar can have drastic effects on one's health and there is clearly a need for the provision of care specific to older people.

The Government of Rajasthan's expenditure on health care is one of the lowest in the country, as 95% of revenue is allocated to meeting other needs¹⁰ and the State shows some of the lowest health indicators in India. Primary health care in the State has not reached a large number of poor people, especially women, people belonging to the lower castes and communities living in remote areas.¹¹ Health problems are linked to poverty, poor hygiene practices, insufficient education and limited access to health services due to remoteness of villages, limited trained staff often shared between health posts and the high level of absenteeism among health practitioners.¹² A study on health care delivery in rural Rajasthan has shown older people and women at all ages reporting poorer health than other community members¹³. Health staff often do not have knowledge of geriatric health, thus older people do not receive appropriate treatment. Health care awareness, particularly among women, is limited due to social, cultural and economic constraints. Some of the common health problems are linked to limited access to water and knowledge of hygiene and sanitation practices. There are only two PHCs in the project areas, thus making many local villagers travel between 15-75kms to access health care. Auxiliary nurses (Anganwadis) are available in most of the project villages, but they usually focus on maternity health rather than geriatric or other specialized needs. In addition, rural people have a tendency not to access modern medical treatment, as they prefer to heal naturally or through herbal treatments, often prescribed by untrained traditional healers.



The long distances between hamlets and medical care are a major constraint

E. Aims and Objectives of the Study

¹⁰ Public Spending on Health in Low Income States. Mita Chowdhury. 2006

¹¹ Rajasthan Human Development Report. 2002.

¹² Absenteeism in public health facilities in several Indian states (Chaudhury, Hammer, Kremer, Muralidharan and Rogers, 2003)

¹³ Wealth, Health, and Health Services in rural Rajasthan. Abhijeet Banerjee et al. May 2004.

Little work has been done in determining older people's health status or the best methods of healthcare delivery for them. In order to ensure that older populations living in this region, and throughout India, are able to realize a healthy and dignified life a thorough review of their health needed to be carried out, and realistic recommendations made for the improvement of health, particularly on a state level. Thus, Help Age International and GRAVIS have planned this study as a part of the European Union funded project POC implemented between 2008 and 2013¹⁴.

Aims and objectives

- ❖ Estimate the Health Related Quality of Life (HRqL)¹⁵ of older populations between 50-70 years of age in rural areas of western Rajasthan
- ❖ Assess the nature, role and attitude of both clinical and family based care givers for members of the target population
- ❖ Identify specific physical health issues facing the target population, particularly with regards to non-communicable diseases
- ❖ Generate realistic and feasible policy recommendations that ensure older people's health needs are met and their dignity maintained.
 - ↔ Specifically for older people living in the Thar
 - ↔ Generally for state and national populations

F. Scope of the study

The study was conducted in 12 remote villages of the Thar Desert, Rajasthan, India. The literature review for the study was organized at the State level, national level and global level. In terms of the recommendations of the study, the suggestions aim at improving national level actions and on enhancing global partnerships and solidarity to facilitate better health status for older people living in vulnerable settings.

II. METHODOLOGY

¹⁴ Promoting Older People Led Community Action to Reduce Poverty in the Thar Desert of India

¹⁵ Questionnaires to assess the health status of communities

The research was conducted in 12 villages of two districts of the Thar Desert region, namely Jodhpur and Jaisalmer. Both these districts are extremely arid and older people in these villages live in great difficulties and under poor health conditions. The villages were also the project area of the POC project.

A. Evaluation tools used

Following evaluation tools were used :

- ~ HRqL Survey with older People – a total of 207 older people surveyed out of which there were 108 women and 99 men
- ~ Caretakers assessment survey – 192 caretakers were surveyed, 28 women and 164 men.
- ~ Focus Group Discussions (FGDs) with older people – a total of 12 FGDs were organized attended by 157 older people – 83 men and 74 women.
- ~ 100 physical exams of older people conducted – 54 men and 46 women.

B. Phases of the study

1. Preparatory phase

This phase included -

- ~ Preparatory meetings
- ~ Selection of villages and finalization of framework and formats
- ~ Forming survey teams and their trainings

2. Data collection phase

This phase included :

- ~ Conduct a desk-top research to gather relevant information and trends
- ~ Organization of field visits
- ~ Conducting Focus Group Discussions (FGD) and interviews with care-givers and older

people

- ~ Expert level discussions
- ~ Compilation of case-studies

3. Compilation and consolidation phase

Included in this phase were:

- ~ Interpretation of information collected
- ~ Synthesis of findings
- ~ Report writing
- ~ Final editing

C. Ethical Considerations

- ❖ Participants were requested to give informed consent before participating in HRqL survey
- ❖ Participants' responses to HRqL survey will be kept confidential
- ❖ Participants were requested to give informed consent before participating in care giver surveys
- ❖ Participants' responses to care taker survey will be kept confidential
- ❖ Participants were requested to give informed consent before submitting to physical examinations
- ❖ Participants' medical status as determined by physical examinations will be kept confidential
- ❖ Participants were informed of the intent of the study; including potential benefits
- ❖ GRAVIS and Help Age International will acknowledge their role in the study

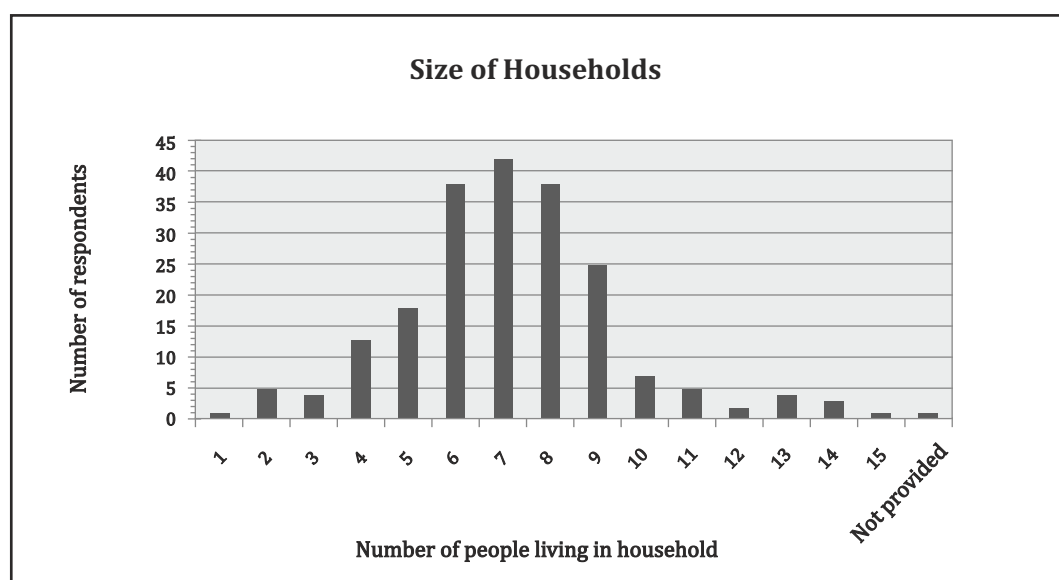
III. RESEARCH FINDINGS

As stated earlier, the field level research was conducted in 12 remote villages of the Thar Desert. This section gives the details of research findings and summarizes the conclusions. Based on the information collected through evaluation tools described earlier, the research findings are categorized in the following groups:

- A. General information on the community
- B. Focus group discussions and HRqL survey findings
- C. Caretakers' assessment findings
- D. Physical exams results

A. General information on the community

The survey was administered amongst elderly people living in Bap and Fatehgarh blocks in Jodhpur and Jaisalmer districts of Rajasthan, respectively. The highest percentage of



respondents was noted to be in Ghator village (Bap) and the fewest from Mandali (Bap).

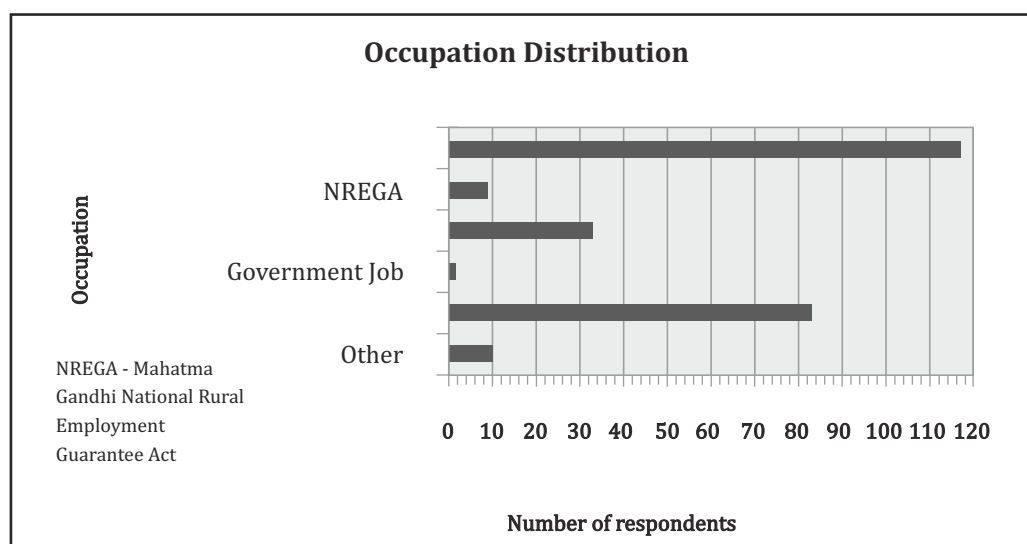
A total of 207 respondents were interviewed for the study. The age of respondents ranged from 50 to 87 years old. A large number of the respondents belonged to the age of 65 years and then others significantly between ages 60-65 years. The lowest age that was interviewed was 50 years and the average being 71.375.

The number of respondents who were female were more (108 persons) than men (99

persons).

The largest number of respondents stated that they had 7 members in their household. The lowest number of family members in a household was 1 person.

Amongst the respondents a large number (131 persons) had to still work for a living, while

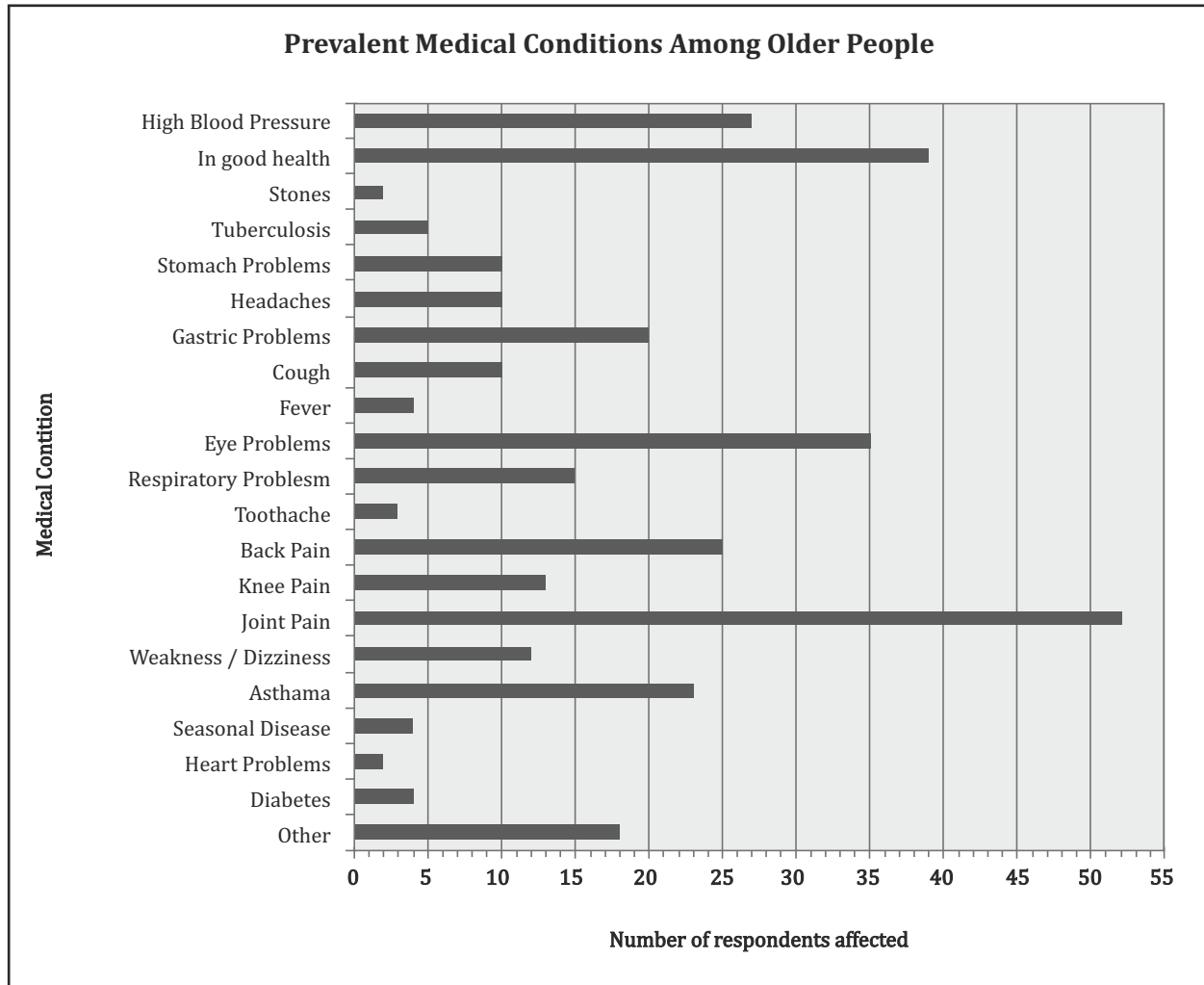


others did not (76 persons). Most of the persons interviewed earned a livelihood by practicing agriculture or carrying out manual labour. Animal husbandry is also practiced by older persons so as to earn a living. Very few respondents were in a government job that ensures a confirmed position and earning a pension after retirement.

B. Focus group discussions and HRqL survey findings

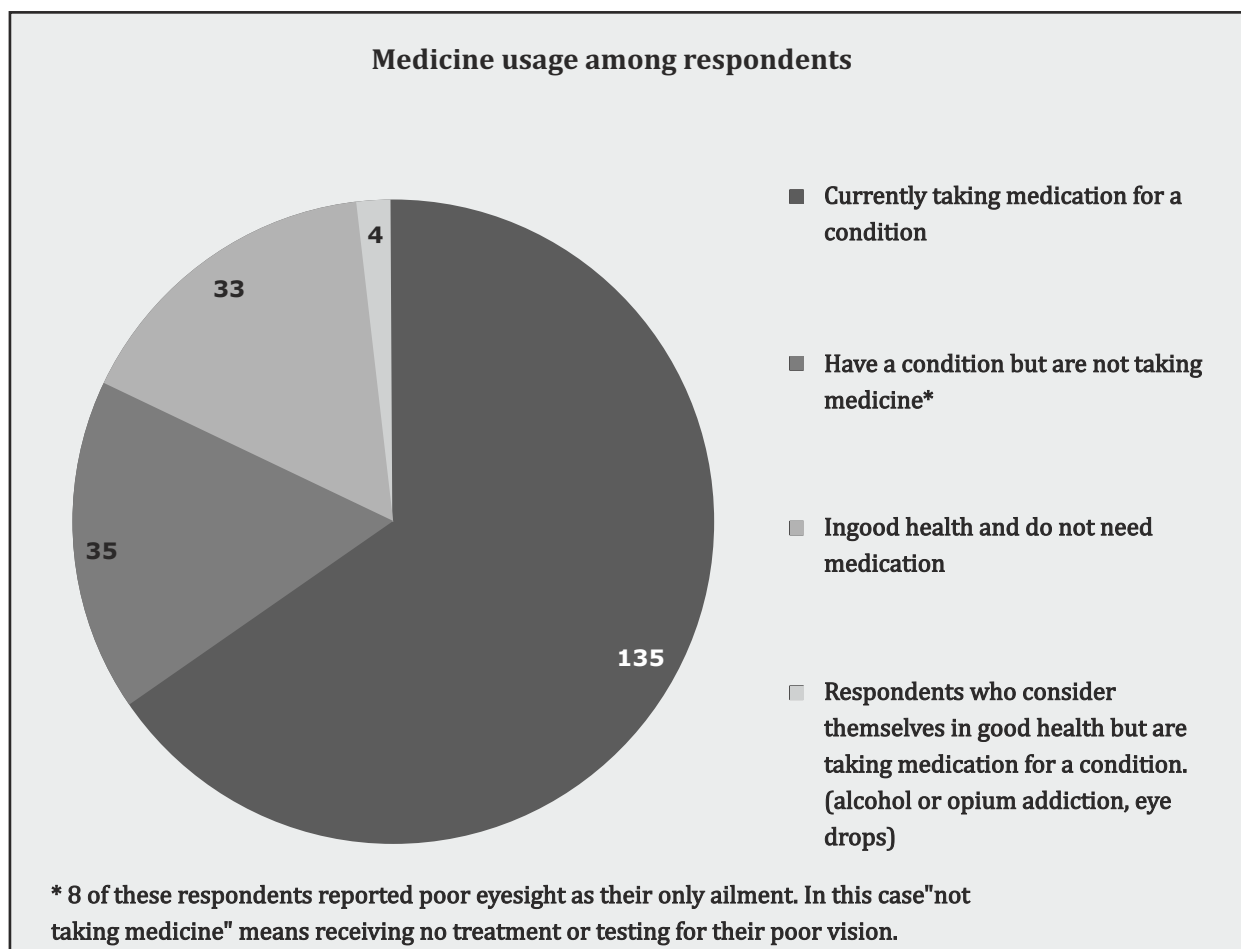
Common health problems among older persons

The interview made a note of the most common ailments that inflict the older persons in the Thar Desert. Pain in the joints, eye problems, high blood pressure, asthma, back pains, gastric and respiratory problems were reported to be the highest. Despite the complaints stated, more than 19% persons stated that they were in good health. Seasonal ailments such as cough, fever, etc. were also reported by almost 5% of the persons interviewed.



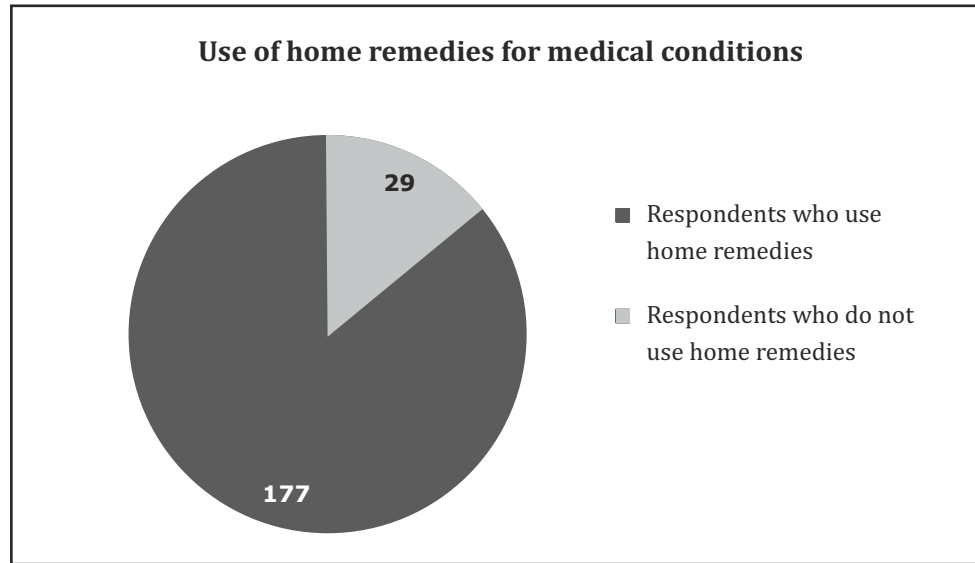
The purpose of the Health Related Quality of Life survey was to assess how older individuals perceived their own state of health. The question that produced the above data was open-ended in order to give respondents an opportunity to voice any medical issues they are experiencing on their own terms. Rather than providing a list of conditions and have respondents choose, this method allows for a more honest assessment. There were several people who responded that they are in good health, but then, in a later question, described having joint or body pain when doing certain tasks. Since they had already demonstrated that they considered themselves healthy overall, the answer to the first question was not altered.

Methods of treatment

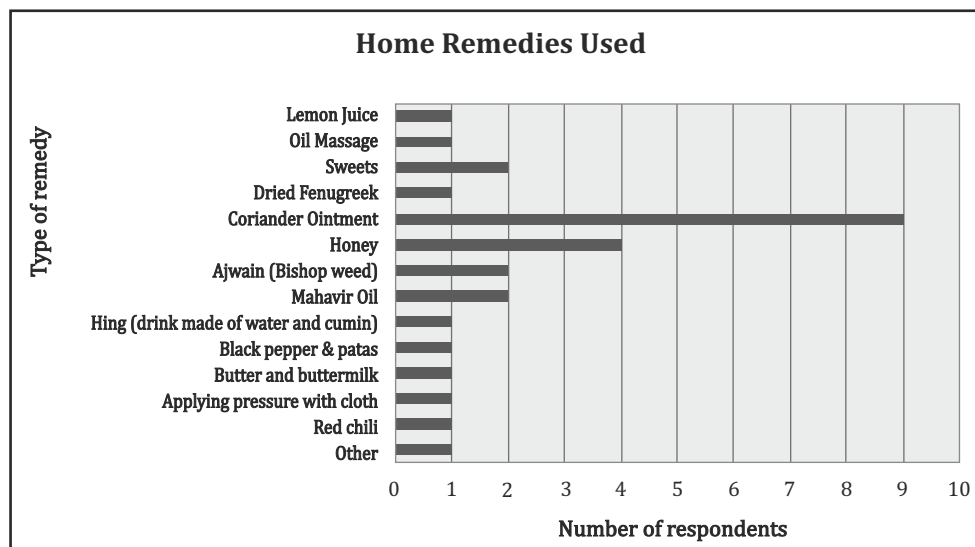


Of the total number of respondents, 65.2% persons stated that they were currently taking medicines for some ailment or the other. 16.9% of the persons stated that they suffer from a medical condition but do not take any medicines for it (8 of these respondents reported poor eyesight as their only ailment. In this case "not taking medicine" means receiving no treatment or testing for their poor vision). A close 15.9% stated that they were in good health and did not need any medication.

85.5% of the respondents stated that they do not use home remedies for any ailments they might be suffering from. Hence, a large percentage of them prefer to take prescriptions from a certified doctor. This information was further supported by data collected on visit to unregistered doctors. 89.8% of persons have not visited an unregistered doctor. The remaining 7.2% have visited such doctors.

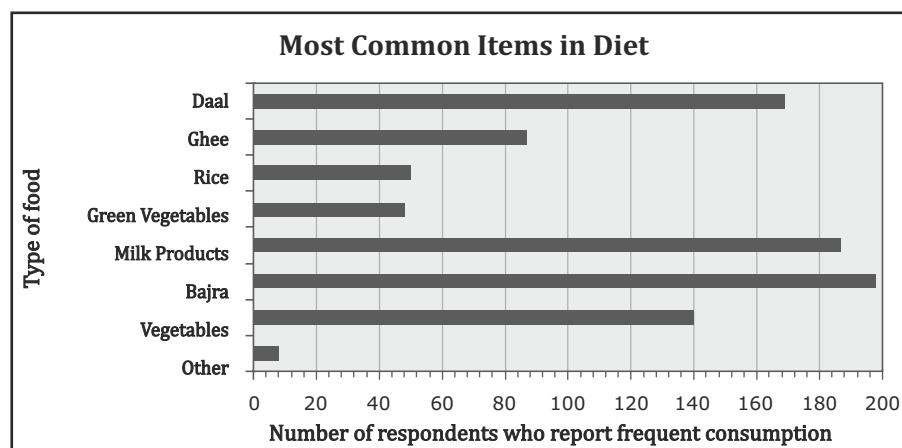


Of the persons who do use home remedies then it is items made from coriander or honey, and other locally available spices.

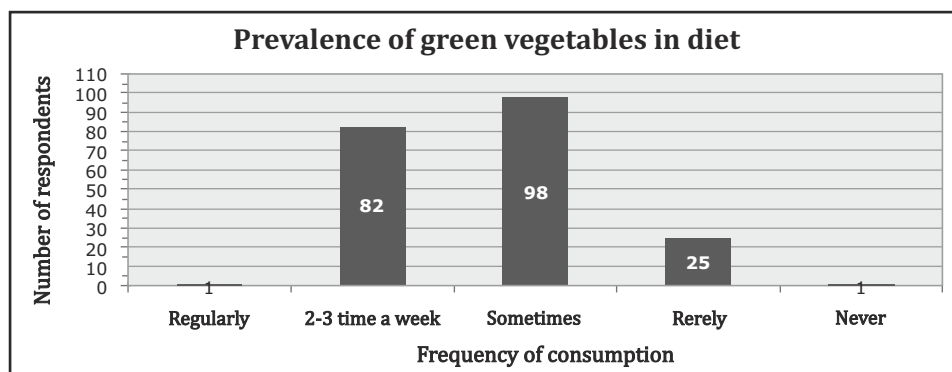


Diet staples

The Thar is an arid zone, where very few green vegetables can be grown easily or without assistance of irrigation. The staple cereals and other grains are also, hence, consumed in a manner that is reflective of this environment. Bajra (Pearl Millet) is the most commonly consumed cereal, as compared to Rice, which is not consumed in far less quantities. Animal husbandry is practiced as a means of livelihood for many and this again is reflected in the consumption of milk products. Daal (Lentils) is the other major component of the daily meals.

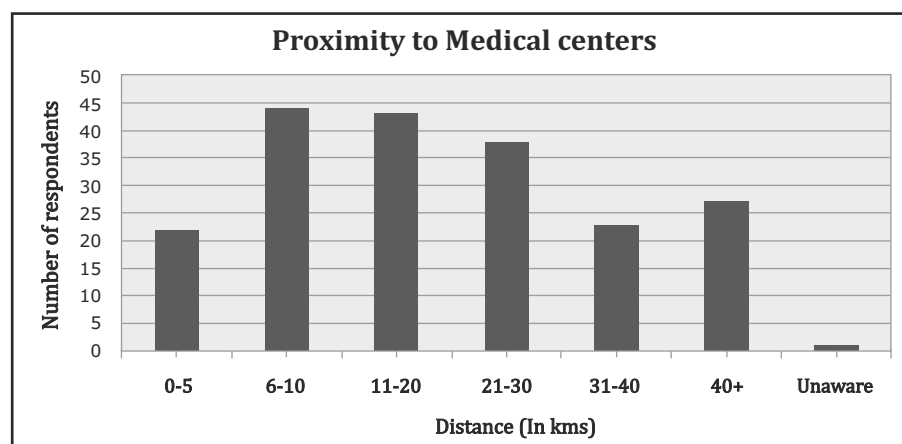


Green vegetables are not eaten regularly in this region. They can be grown easily only during the monsoons or when water can be made available easily through means of irrigation. GRAVIS initiatives in making Khadins have helped in increasing the consumption of green vegetables as they can be grown more often and not restricted to just the monsoons. Hence, one can see that almost 47.3% of the respondents consume greens at least “sometime”. A good percentage (39.6%) of persons even has it as much 2-3 times in a week.



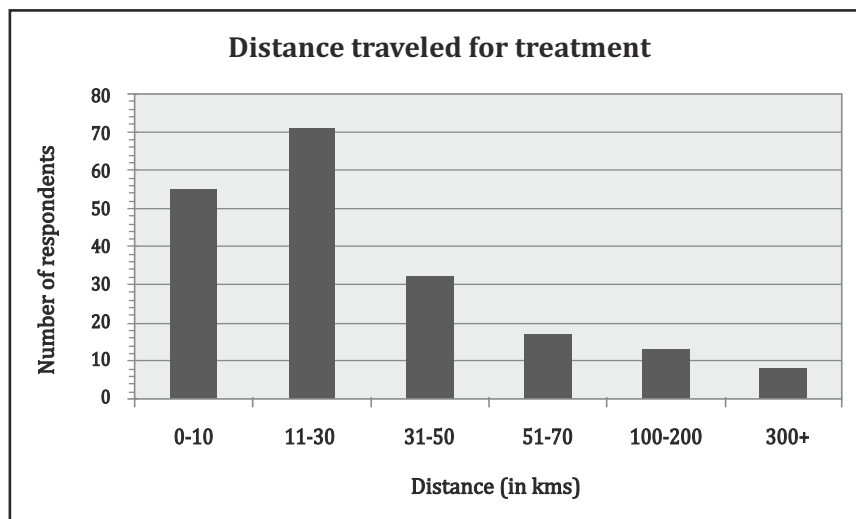
Government programs pertaining to older people

This chart helps to demonstrate the impact that living in a rural area can have on access to

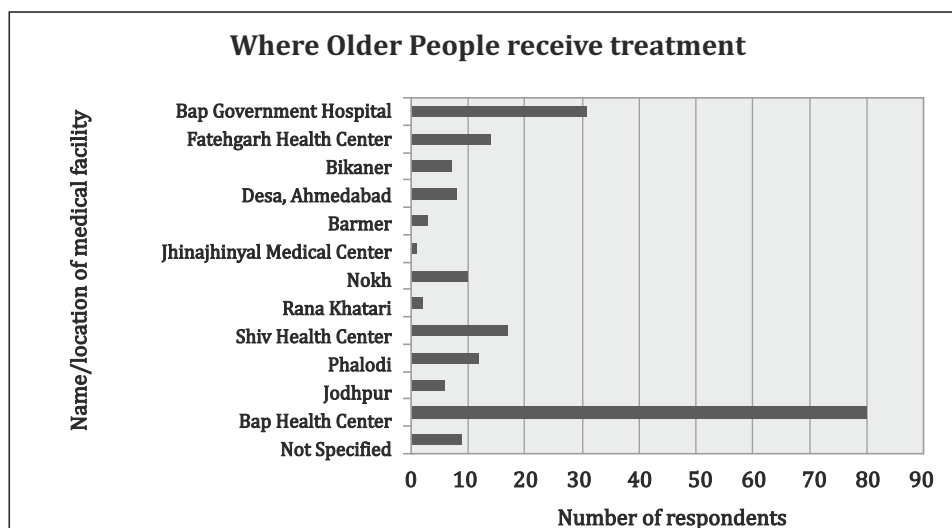


healthcare. Roughly one quarter of respondents must travel more than 30km to reach the nearest medical center. A significant 15% of the persons have to even walk as much as 40 km to a medical centre. Transportation availability is negligible. With older persons and in the case of emergencies, this is a difficult proposition.

Although the majority of respondents are within close proximity to a health center or



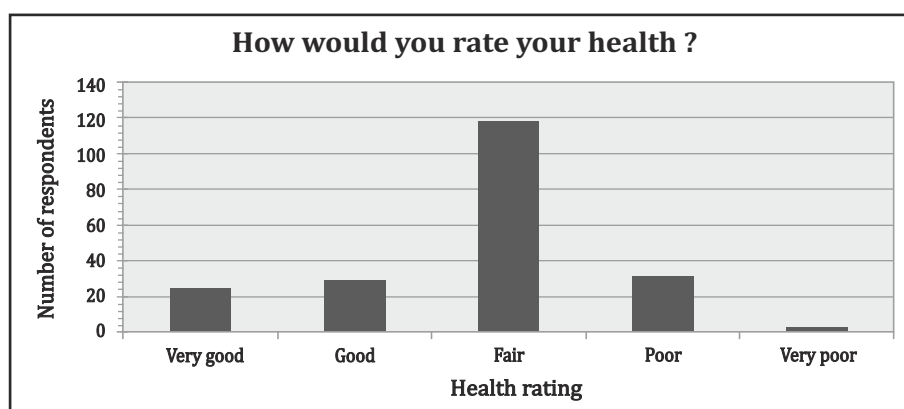
government hospital, some travel farther to receive specialized treatment for their particular case. The chart below illustrates how far older people travel to meet their individual health needs.



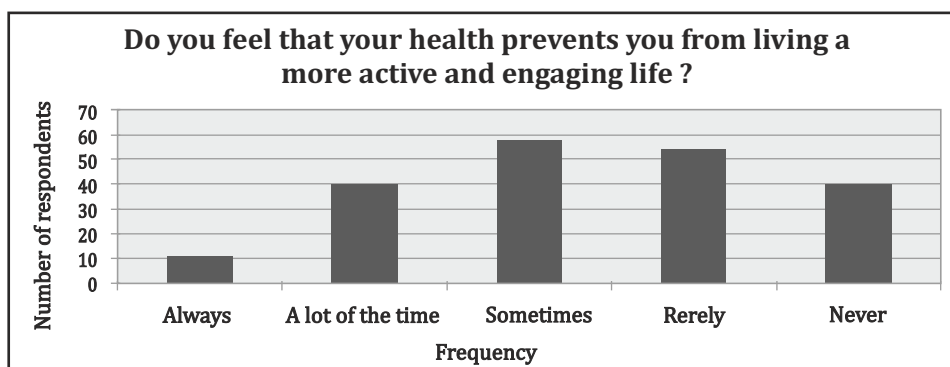
The interviews determined exactly where the older persons went to seek treatment. More than 38.6% of the respondents specified that they see Dr. Kailash Modi at the Bap Health Center. Otherwise they visit the government hospital or the Primary Health Centre (PHC) at Bap. The counseling undertaken by the village health workers of GRAVIS and the medical camps conducted has made access to cheaper and regular healthcare for older persons at government medical centers, possible.

Perceiving impact of age on healthcare access

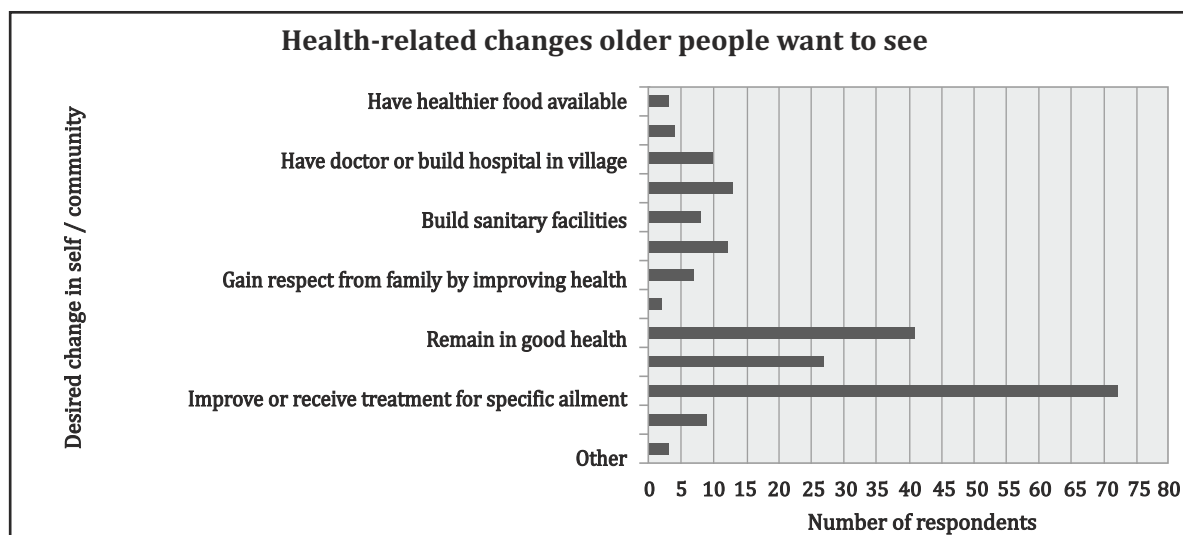
The following questions were designed to generally conclude how older people perceive their own state of health.



A large proportion – over 55% - of the respondents stated that they perceived their health status to be 'fair'. It is noticeable that similar proportions of people have stated that their health is 'good' and others 'poor'. This is further elaborated by looking at the following graph that understands the perception of older persons towards leading an active life. A close to 60 respondents felt that their health status prevents them from leading an active life. At the same time, a close number of respondents also stated that it is 'rare' that health is the cause of their lack of an active and engaged life at this age. This could possibly be then related to other societal and familial issues that concern older persons.



If health factors are a cause for worry in the life of older people, then it is important to see what changes they would like to see towards making a significant improvement. This final open-ended question was intended to gauge what changes individuals wanted to see in their personal health, but many respondents took it as an opportunity to describe changes they wanted to see in their communities.

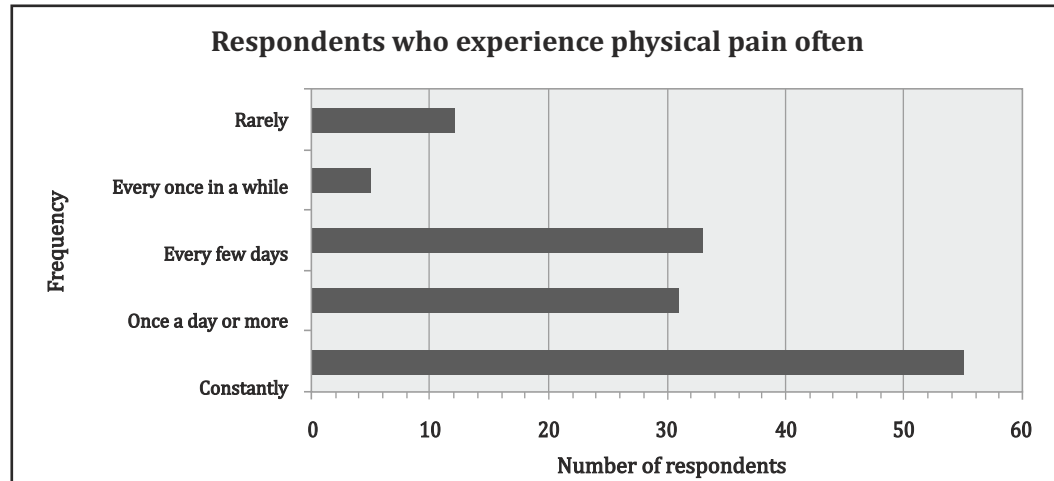


A number of older people said that they wanted sanitary facilities, more frequent health camps, and medical care in their villages, be that in the form of a hospital or a doctor visiting frequently.

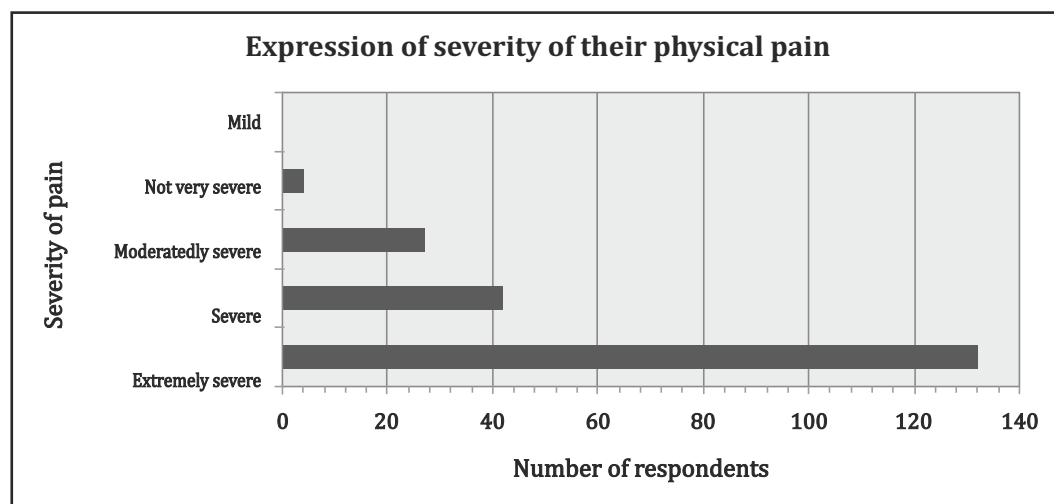
It is important to notice that the majority of persons stated opinions that indicate continued provision and access to medical facilities in the remote areas. The ailments that the older persons in these areas suffer from are typical and have remained the same over the years. GRAVIS has been able to take due notice of the fact and designed programs accordingly. Hence, access to these healthcare facilities has been made possible. It is the need of the older persons to have it continue this way and only improve further.

There were only 4.34% respondents who didn't demonstrate any hope for improved health, and their answers were various forms of "I am old and have accepted that I will be in pain/unhealthy." The 9.17% who replied that they wanted to improve their health in order to gain respect from their families/be able to contribute to housework demonstrate that many older people may feel they are a burden on their families and caretakers.

Most of the respondents (66.18%) stated that they experienced physical pain most of the time. However, they did not specify where exactly they feel physical pain. The remaining 33.8% stated that they did not feel any physical pain.



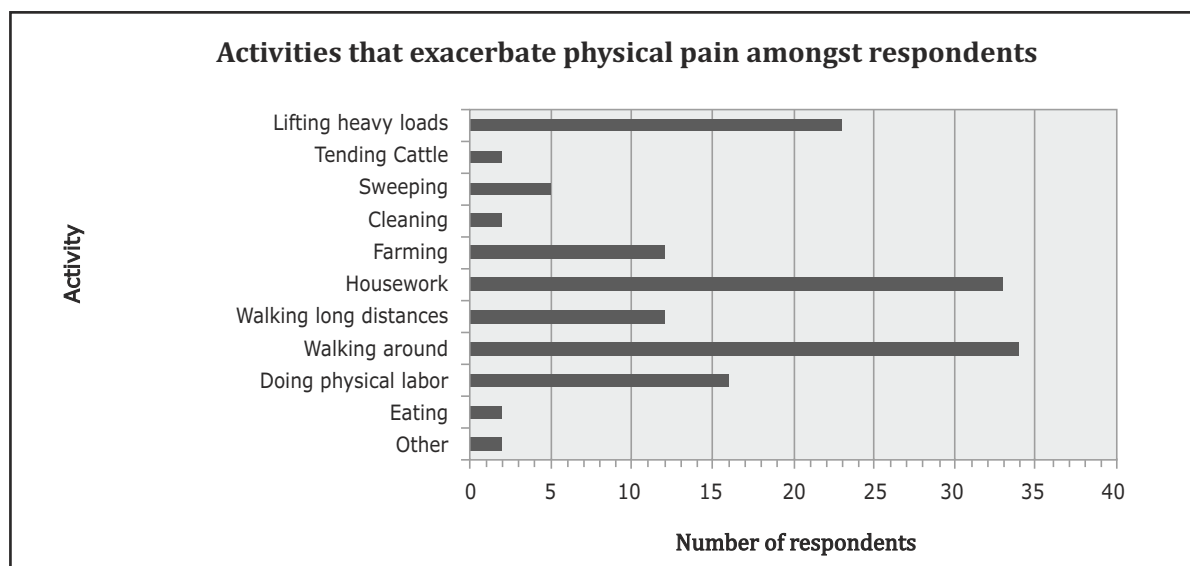
Almost 26.5% of the respondents claimed to be in pain constantly. What is noticeable is that other respondents have also claimed to be in pain either 'every few days' or 'once a day or more'. In other questions it was stated that joint pains was reported in significant number as the major ailment amongst the older persons in the area. This data supports the other findings.



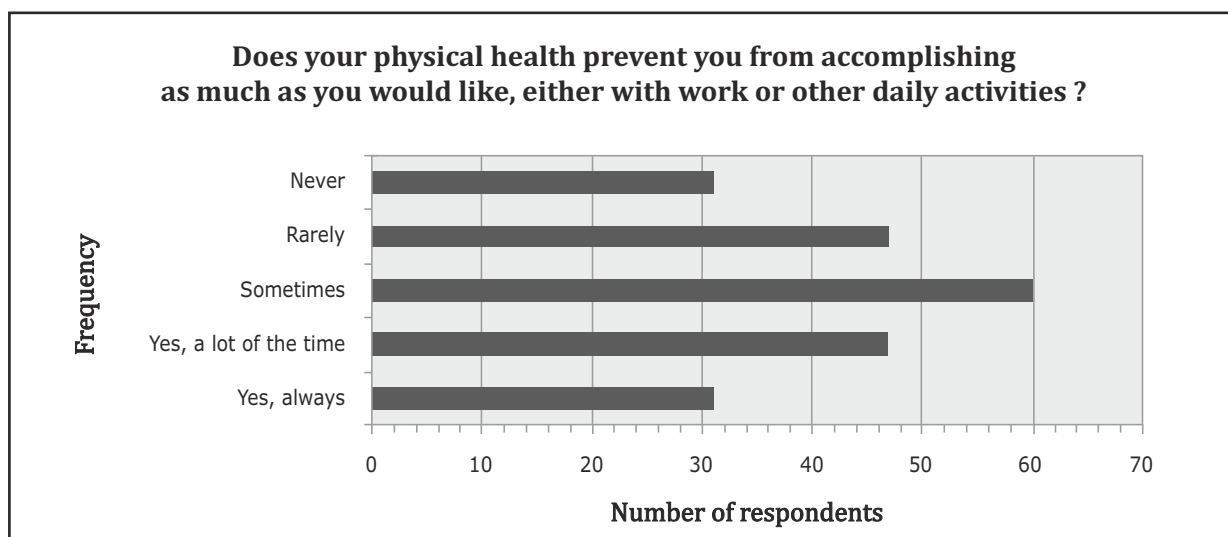
The graph below explains the various activities, which the older persons have difficulty in carrying out. These are everyday activities, but have got affected since joint pains, arthritis, high blood pressure and eyesight problems make them difficult to be carried out. Large number of respondents stated that they experience extreme physical pain in task such as walking from one place to another, doing housework and lifting heavy loads.

Consequently activities that are related to earning a livelihood have also got affected. Farming, carrying out physical labour, lifting heavy loads were specified.

Incapacity to carry out the daily tasks was explored in the interviews administered, further.



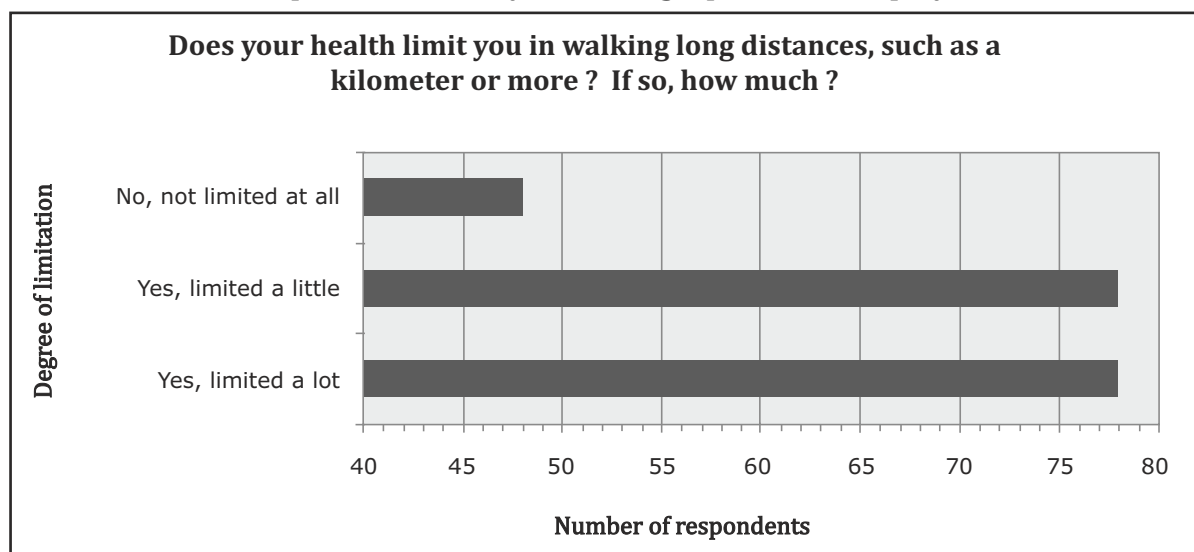
A large number of respondents stated that daily tasks such as walking around in the village, preparing food, completing one's personal hygiene tasks like bathing and wearing clothes, or even participating in social, family and/or community events was difficult to do. In the graph below it is shown that 50- 60 respondents stated that most of the time it was difficult to carry out their daily tasks. Yet another 45 respondents also stated that it rarely poses a problem and that they were able to carry out most of the tasks at home and around the village.



Another query revealed that more than 75 respondents stated that they their health limited them in terms of capacity to walk more than a kilometer. For older persons even short distances have become difficult to negotiate and this fact needs to be noticed by the community at large and their families in particular. Hence, access to basic services at home and

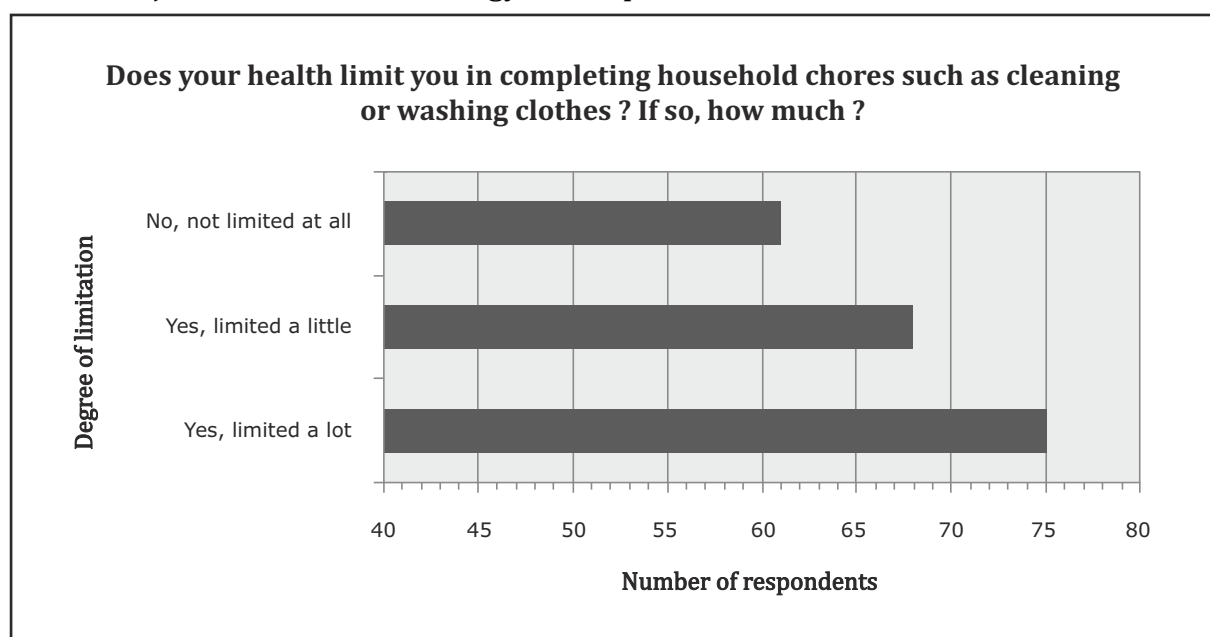
in the village would need to be tuned accordingly.

Heavy tasks such as cleaning of clothes and the house and kitchen related tasks become difficult for the older persons to carry out. The graph below displays that more than 70



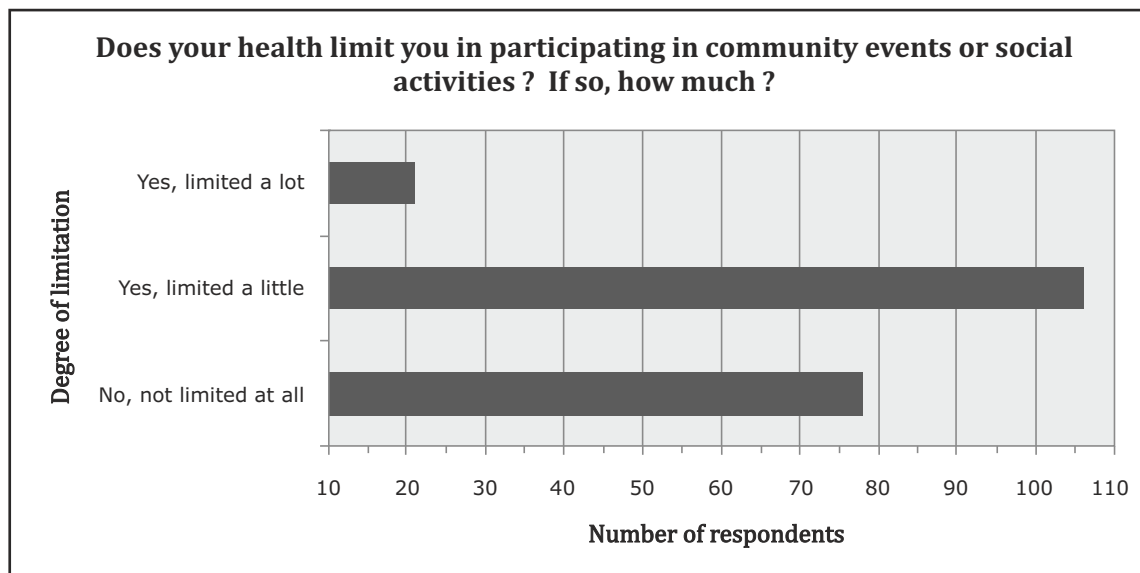
respondents were limited in their ability to carry out daily chores. In another question, it is explicitly stated by over 50 respondents that they feel tired most of the time. Hence, even the little that they have to do every day tires them out completely.

Most of the respondents stated that participating in social, family and community events was not possible at all. This is mainly because they are unable to walk to the location or just don't have the energy to be a part of it.



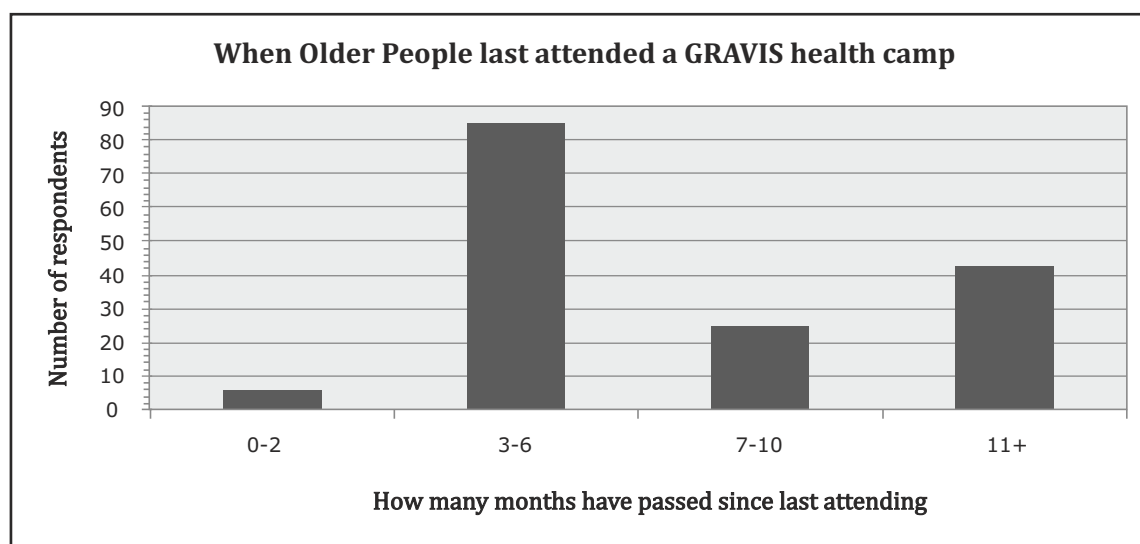
GRAVIS health camps

Out of the respondents interviewed, 77.77% persons stated that they have been regularly



attending the medical camps organized by GRAVIS in the remote areas. The remaining 22.22% have not done so yet.

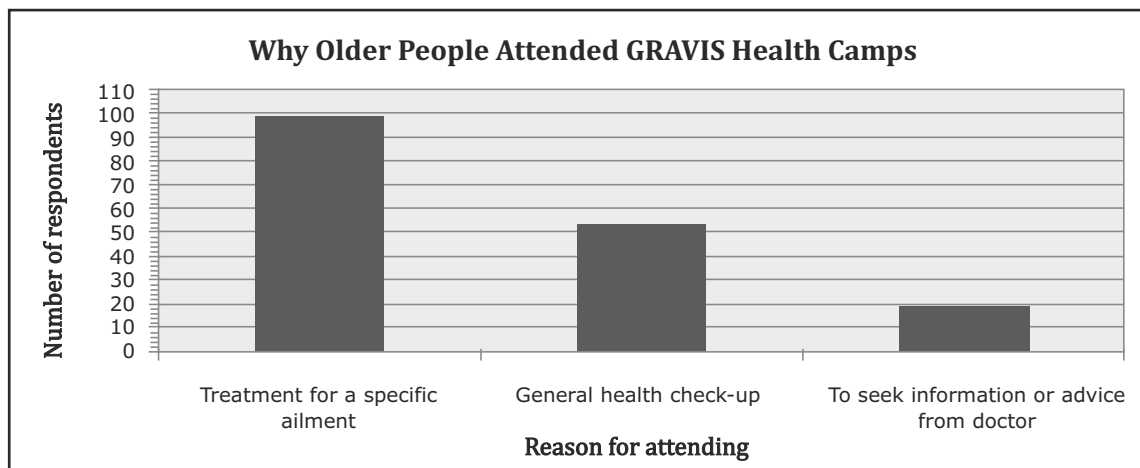
The medical camps have been organized for precisely the reasons that have been stated earlier



– lack of access to PHCs, remotely located from villages, lack of regular and dependable

transportation services and simple negligence on behalf of the family members.

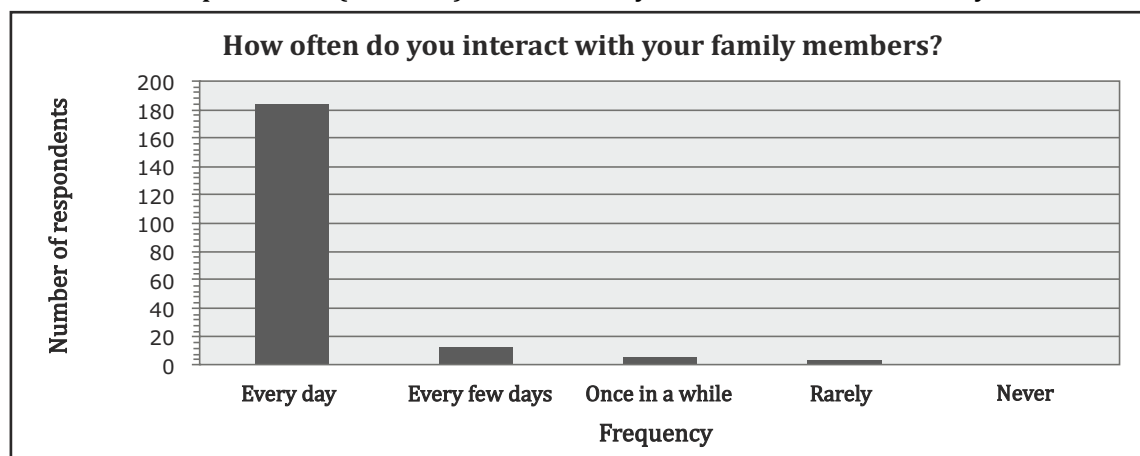
The medical camps organized by GRAVIS have made it possible for the older persons to meet with government doctors and get treated for the ailments they have been suffering from.



Health seeking behavior of people has changed since the years GRAVIS has been working in this area. As can be seen from the graph above most of the older persons attend the camp because they seek treatment for a particular ailment. It is significant that over 20 respondents also attend the medical camps so as to seek information and advice from the doctors present there.

Assessment of social functioning

More than 180 respondents (86.95%) said that they interact with their family members every

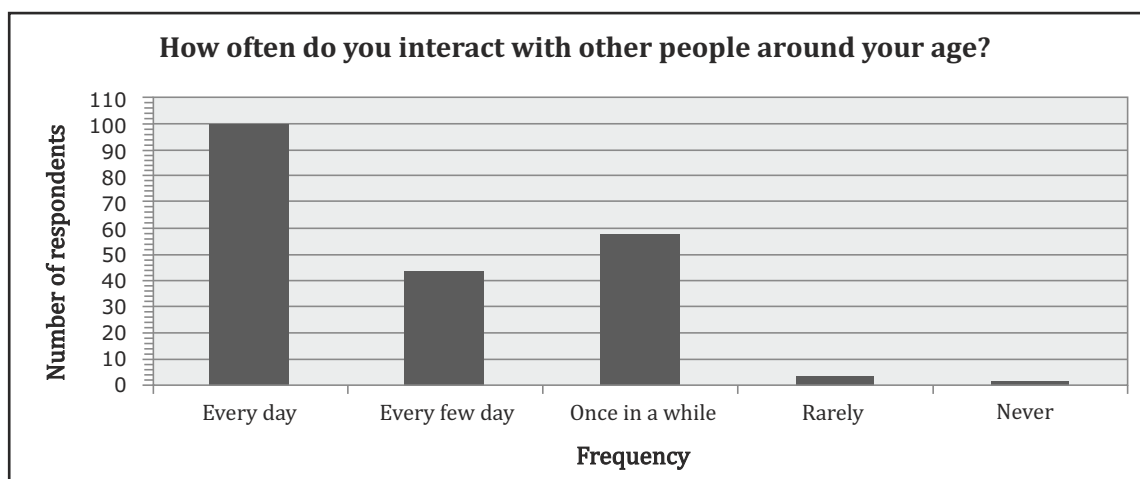


day. Being located in India and a rural area, most of the older persons live with their extended families and hence interaction with them takes place every day on a regular basis.

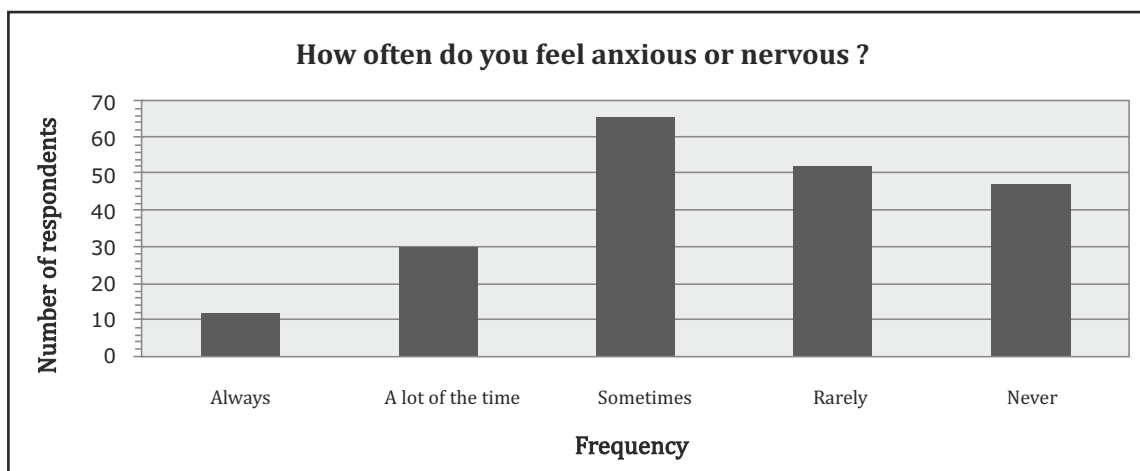
Just to note, since only 1 of the 207 respondents reported living alone, there may have been some confusion among the 9 respondents who answered “Once in a while,”

“Rarely,” or “Never.” The interactions with friends and social acquaintances also take place on a daily basis. Older persons also meet their own age group's people on a daily basis far more often than rarely or never.

Assessment of emotional and mental health



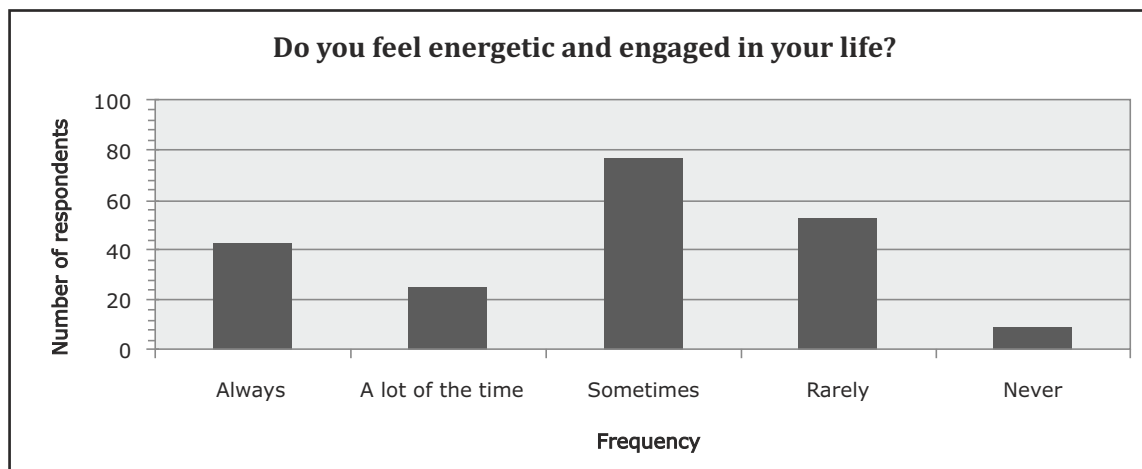
Over 60 respondents (28.9%) stated that they do feel anxious or nervous 'sometimes'. Almost 14% of the respondents felt anxious a lot of the times. This may be related to the difficult



circumstances they have to live in and even the ailments they suffer from. A person suffering from respiratory or high blood pressure related issues would be most inclined to suffer from anxiety. This is further reinforced by the fact that over 70 respondents stated that they felt depressed or sad often. It was only 21% of the respondents that stated that they were never sad or depressed.

Assessment of vitality :

More than 40 respondents stated that they rarely felt energetic about the life they were

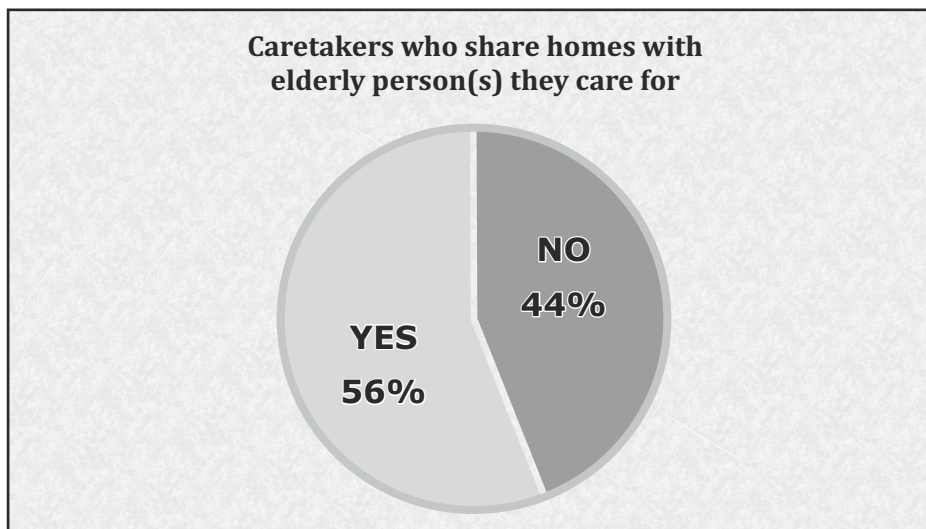


leading. However what is noticeable is that over 33% persons stated that at least 'sometimes' they felt engaged with enough activities in their daily life.

C. Caretaker assessment

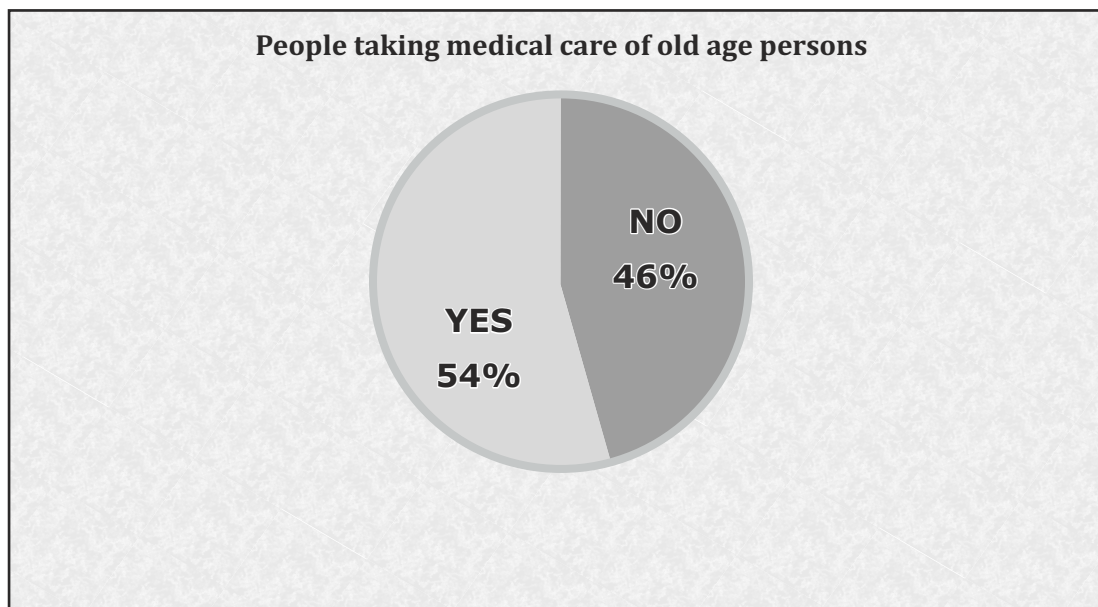
A total of 192 caretakers were interviewed out of which 15% were females and 85% were males. With the help of a detailed questionnaire, a range of questions explored caretakers' perceptions on their knowledge, burdens of caregiving need and future prospects. The ages of caretakers ranged from 18 to 50. In about 50% of the cases, the caretakers were the children of older people.

It was found that about 56% caretakers live with older people and about 44% are from the



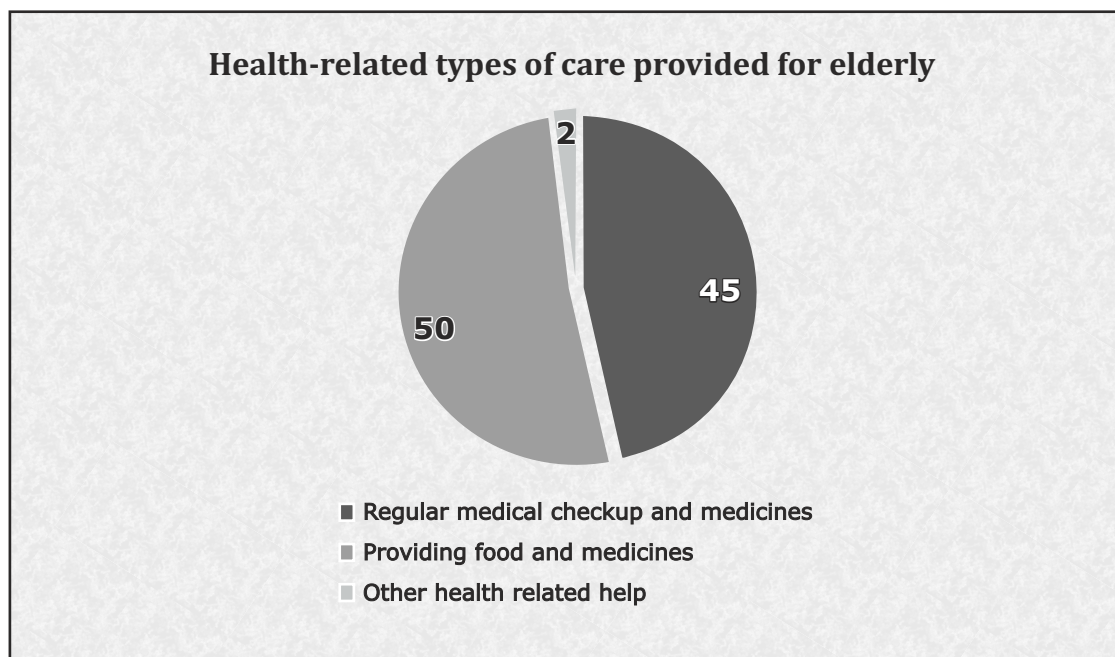
community not living in the same household. Similarly, 54% provide medical care to older people whereas the other 46% provide them basic support and assistance of non-medical nature.

Another set of questions revealed that only 2% caretakers take older people to health facilities



for regular medical check-ups. The rest provide them basic support of home-based type.

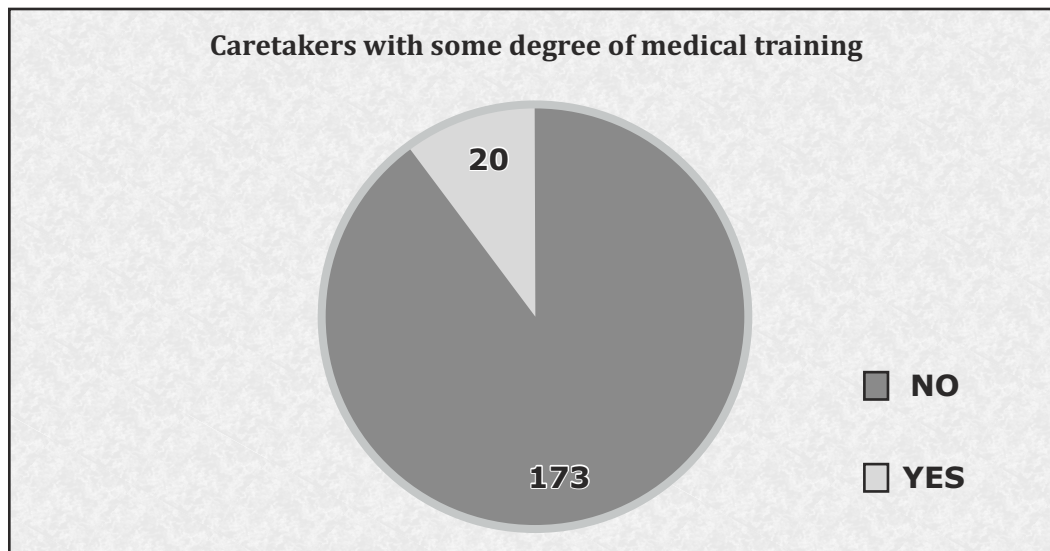
On the training part, most caretakers are untrained and do their work as per a family duty. No training and orientation would mean, no knowledge on diseases and medicines and overall



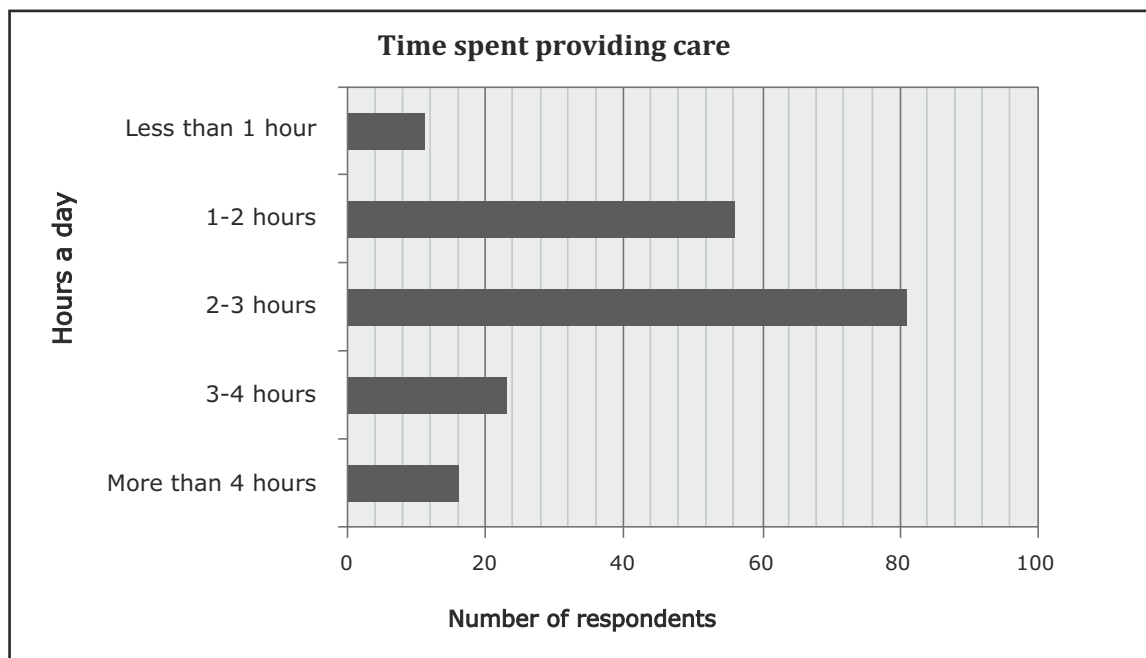
health aspects. Training therefore, for the caregivers, is a strong need.

On the time spent on caregiving, over 40% caregivers said they spent 2-3 hours a day. Some caregivers spent 3 and up to 5 hours a day.

Interestingly, most caretakers think that caregiving is not a major burden for them both



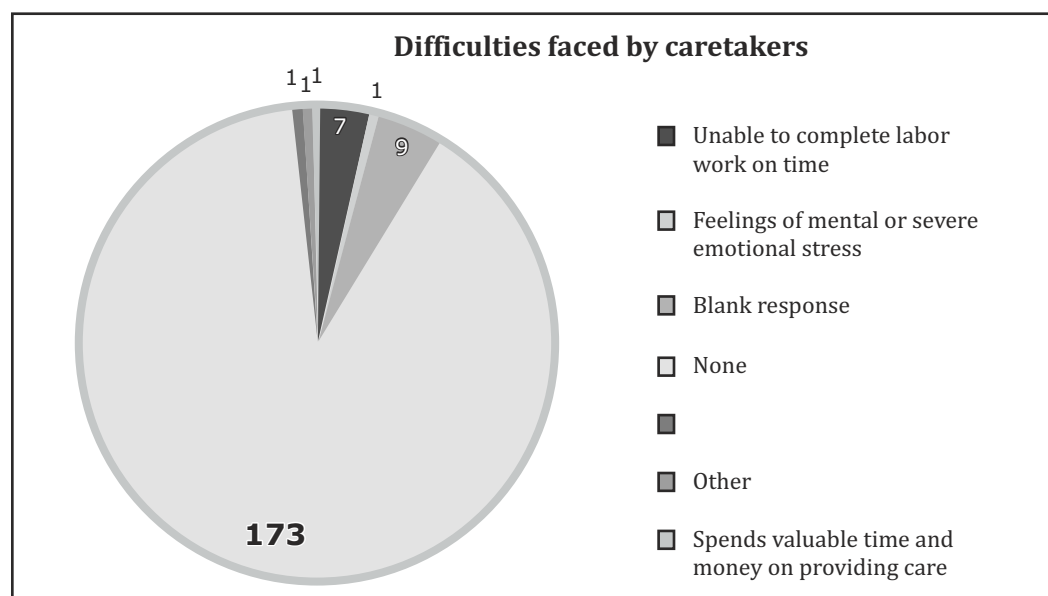
mentally and financially. This again raises the concern on the quality of caregiving owing to lack of training. While no burden of caregiving should be taken as a positive and welcome sign, lack of trainings needs to be associated with it.



D. Results of physical exams

GRAVIS' medical team physically examined 100 older people. These included 54 men and 46

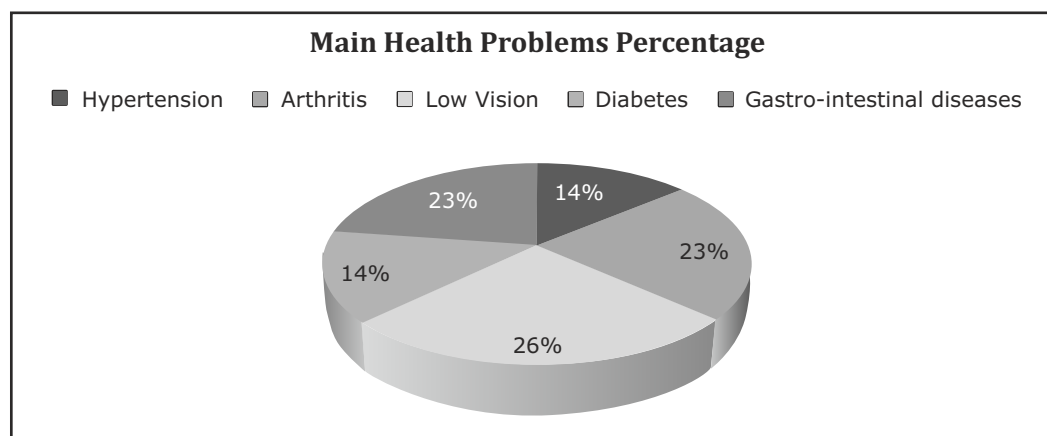
women. The purpose of the physicals was to validate and substantiate the results of the survey and to further guide specific recommendations. Following was carried out during the physical



exams:

- ✦ Overview of medical history and any known chronic conditions
- ✦ Blood pressure measurement
- ✦ Heart rate measurement
- ✦ Respiration rate
- ✦ Heart Exam
- ✦ Lung Exam
- ✦ Head and Neck exam
- ✦ Abdominal exam
- ✦ Neurological exam
- ✦ Dermatological exam
- ✦ Extremities exam
- ✦ Mobility review
- ✦ BMI measurement
- ✦ Blood sugar

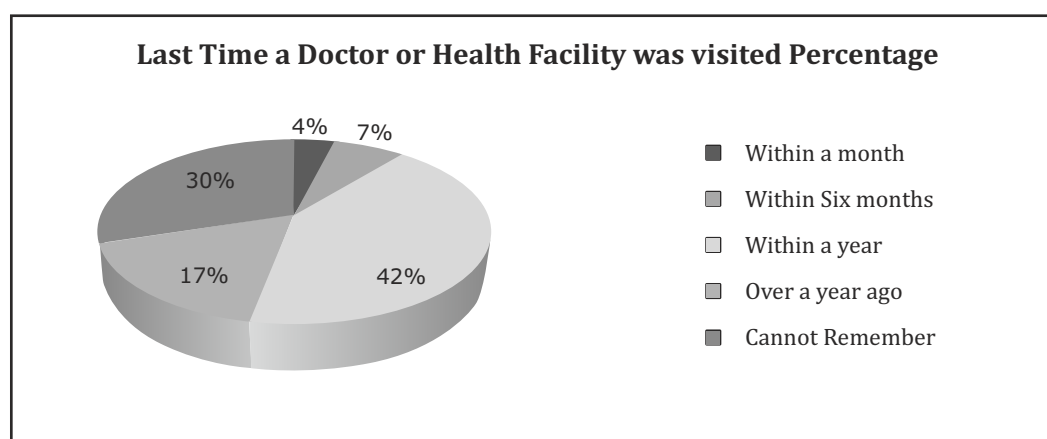
As per the above graph, hypertension, arthritis, low vision, diabetes and gastro-intestinal diseases emerged as leading health problems among older people. Most older people were not aware of their hypertension status. Low vision emerged as another major problem, for which most older people had not sought any medical attention. Main causes for low vision are cataract and refractive errors. Arthritis of various joints emerged as a very common health



problem affecting mobility and daily activities of older people.

The frequency of older people visiting health services is low and poor with only 11% having visited a doctor in the last six months. Nearly 60% have been to a doctor within a year or more. 30% do not have the last memory of a medical support.

In the compilation of medical histories, the older people were asked about a fever episode in the last one year. 58% older people remembered of having a spell of sickness in the last one



year due to a communicable disease, with possible options being malaria, respiratory diseases and intestinal infections.

E. Conclusion of findings

The tools used for the research study – HRqL survey, FGDs with older people, caretakers' assessment and physical exams – presented a good picture of older people's health status and their perceptions. The exercise also brought insights on how accessible health services are for older people and what the service gaps are. The caretakers' assessment was an important part

that detailed their perceptions and concerns in the context of older people's health. The findings could be summarized in the following main points :

- ❖ Most older people are working and are engaged in agricultural activities, meaning they contribute to the family income.
- ❖ The majority of older people are on medication, i.e. atleast one medicine. Very few older people have been using home remedies for their health problems.
- ❖ The majority of older people are far from the nearest health services, the minimum being 6 kilometers. The majority of older people have to travel more than 11 kilometers to reach a doctor or health post.
- ❖ Nearly half of the older people consider their health “fair”, meaning no major health issues and with health problems of a mild degree. The rest rate their health between very poor and very good.
- ❖ Nutritional diversity in diets is an issue for older people. The main nutrient is carbohydrate and there is a definite lack of vegetables and fruits in the diet, causing a deficiency of micronutrients.
- ❖ GRAVIS health camps are well accepted by the community. However, most older people see their benefit in getting treatment rather than health education or knowledge.
- ❖ Overall, the social interaction status is good. Most older people are with their families and interact with the family regularly.
- ❖ Mental health status is a concern to an extent. Nearly half of the older people believe that they go through mental health issues.
- ❖ Pain originating from various causes is a main health issue affecting mobility and daily life for older people.
- ❖ Caretakers in the community are mostly available. In most cases, they are family members, children of older people.
- ❖ The caretakers, largely, are untrained and provide basic aid to older people without much knowledge on their health status and diseases.

- ❖ Most caretakers do not feel time or financial burdens on themselves from providing care to older people. However, that may relate to a lack of training, preventing them from providing medical check-up and aid support.
- ❖ The most common health problems of older people were found to be hypertension, arthritis, low vision, diabetes and gastro-intestinal diseases.
- ❖ The frequency of older people visiting health services is low and poor with only 11% having visited a doctor in the last six months.
- ❖ Communicable diseases in the communities are an issue too among older people. 58% older people remember having had a spell of sickness in the last one year due to a communicable disease.

IV. GOOD PRACTICES: CASE STUDIES

The study also looked at interventions carried out at the grass-roots level in the villages in order to improve older people's health status. GRAVIS as a leading organization working on the issues of ageing in the region has been implementing the POC project in the area along with Help Age International and with the support of the EU. The project has a number of effective

field level interventions.

Training and capacity building of Village Health Workers (VHWs)

VHWs are village-based health volunteers who are trained in basic health skills to support communities' health needs. They act as health educators, counselors and referral linkages between communities and health services. A minor role of the VHWs is of providing curative aid, such as in the case of pain or providing first aid in the case of an injury.

Project POC has trained 15 VHWs in the project villages. These VHWs are working within their communities and provide health education and referral support to communities, and in particular to older people. Their training includes basic awareness of general health, with greater focus on ageing and diseases of old age. After the first orientation training, the VHWs are trained once every quarter and meet once in a month to discuss their progress and future plans.

In their work with the communities, they visit older people in their homes and organize health talks and discussion. They also regularly collaborate with the government health staff at the village level. The VHWs are well accepted in the community and are proving to be very helpful in enhancing older people's health awareness. Their ties with the local government health services are getting stronger too. They are an important link in the service delivery of health to older people.

Outreach medical camps

Due to a scarcity of medical facilities in remote rural areas like the Thar, as has been stated in the study findings too, it is vitally important for projects like POC to reach out to older people with medical services. With this in view, GRAVIS has been organizing medical camps in project villages with the help of a medical team.



This is Bhavari Devi, 60 years of age, from Savara Gaon. Savara Gaon is located 25 km from Baap, where there is no Sub Center or Primary Health Center. Bhavari Devi comes from a SC and was trained as a Village Health Worker in GRAVIS Hospital in 2008. Working as a VHW has helped her to build her confidence and knowledge.

The main objectives behind organizing outreach medical camps are the following :

- ~ Provide medical aid to older people who need it – diagnostic and curative
- ~ Provide referral support to older people to health facilities as per the need, mainly with chronic conditions
- ~ Impart health education in the older people, develop their awareness and in the process improve health seeking behaviours
- ~ Understand older people's health needs and perceptions on a regular basis to change /improve health interventions.

The camps are usually organized by a GRAVIS medical team of one physician and two paramedics. The activity is one day long and the logistical preparations to organize the camps are made by VHWs. Older people in the project villages are very pleased with this activity and are taking good advantage of the service. In the project, about 54 such camps were organized benefitting over 3,500 older people. One criticism of these camps, however, as stated in the study finding, is that older people mainly see it as a treatment option and not health education/health seeking behavior tool.

Overall, this is an effective activity and should continue and be replicated in more villages. On the one hand, it is an effective way of spreading medical aid and on the other hand with stronger focus, it may be valuable in the long run to improve health education and consequently will improve health seeking behaviors among older people.

Advocacy and research

GRAVIS has also been actively engaged in advocacy and research on older people's health statuses to generate evidence and aimed at overall improvement of the service delivery status. Project POC had a number of such interventions over the last five years organized by GRAVIS team.

A medical camp was organised by the GRAVIS team in Baap Block on 19 September 2010. 38 older women and men were treated in this camp. Apart from the treatment, the villagers were given advice on preventive measures such as nutrition, sanitation and hygiene.



An important initiative was taken up by GRAVIS to understand older people's health needs, which gave shape to a comprehensive need assessment document in 2008. The document built the foundation to planning and implementing SCOPE (Self Care for Older People) interventions in the Thar Desert supported by Help Age International and the Tsao Foundation, Singapore. SCOPE revolves around training older people and their caregivers, research on changes brought by self-care and advocacy to replicate the model. The current study is another major attempt to explore the reality in greater details and to lay out recommendations and future approaches.

Another advocacy front has been to organize health talks and campaigns on ageing on days such as the World Health Day (WHD) and International Day for Older Persons (IDOP), and organizing regular advocacy dialogues including older people, service providers and government functionaries.

A national level workshop in this context, titled “Ageing and Development: Health Care Aspects”, was organized by GRAVIS and HAI in December 2012. The event had more than 100 participants with a strong representation of older people followed by service providers, researchers, civil society and the government. The discussions touched upon the current status and on the ways forward.

Advocacy and research interventions of GRAVIS over the last few years have generated greater awareness on ageing and health in the region and have generated good evidences and recommendations for the future. It is envisaged that these outputs will lead to an improved service delivery system for older people and will contribute to realizing the age-friendly healthcare vision.

V. GUEST ARTICLE



Old age and oral health

Dr. Shuchita Sharma

OVERVIEW

Good oral health care should begin at birth as part of overall health care. This important component of health care should not—and cannot—end at retirement. Proper dental care must be a lifetime commitment. Unfortunately, for far too much older population, good oral health care is rarely available. Large numbers of older people suffer with chronic oral pain and periodontal disease, severely limiting regular activities of daily living and impeding their independence. Neglect of oral health may result in the deterioration of overall physical health. Lack of access to care for even routine dental cleanings and exams can exacerbate issues and complicated overall health problems that increase with age.

Oral health can affect general health in many direct ways. Oral health problems can cause pain and suffering as well as difficulty in speaking, chewing, and swallowing. These problems can also be a complication of certain medications used to treat systemic diseases. In addition, the treatment of systemic diseases can be complicated by oral bacterial infections.¹

There are also associations between oral health and general health and well-being. For example, the loss of self-esteem is associated with loss of teeth and untreated disease (caries and periodontal diseases) as well as the economic burden of dental care due to the paucity of dental insurance programs for the elderly. Although oral health problems are not usually associated with death, oral cancers result in nearly 8,000 deaths each year, and more than half of these deaths occur among persons 65 years of age and older.

STATISTICS

India is in a phase of demographic transition. As per the 1991 census, the population of the elderly in India was 57 million as compared with 20 million in 1951. There has been a sharp increase in the number of elderly persons between 1991 and 2001 and it has been projected that by the year 2050, the number of elderly people would rise to about 324 million.² India has thus acquired the label of “an ageing nation” with 7.7% of its population being more than 60 years old.³

The dentist population ratio is 1:27,000 in urban areas and 1:300,000 in rural areas, whereas 80% of the elderly population reside in rural India. Approximately forty per cent of the elderly live below the poverty line and 73% are illiterate. Ninety per cent of the elderly have no social security and the dependency ratio is 12.26. Incidence of oral cancer, which is considered a disease of old-age, is highest in India, 13.5% of all body cancers are oral cancers. Preventive dental care is almost nonexistent to the rural masses and very limited in urban areas. Above all, there is very little orientation of fresh and aspiring dental surgeon towards the special needs of the geriatric population.⁴

CORRELATION OF ORAL HEALTH AND QUALITY OF LIFE

Oral health problems can hinder a person's ability to be free of pain and discomfort, to maintain a satisfying and nutritious diet, and to enjoy interpersonal relationships and a positive self-image.

Overall, oral health problems are more frequently found in an older adult population for whom other health problems are often a priority. Oral pain is a sign of an advanced problem in a tooth or in the gingival (gum) tissues.

Although pain may dissipate with time, professional attention is needed to effectively manage the affected tooth or tissue. Oral health problems, whether from missing teeth, ill-fitting dentures, cavities, gum disease, or infection, can cause difficulty eating and can force people to adjust the quality, consistency, and balance of their diet. For example, edentulous people (those with no natural teeth) tend to eat fewer raw vegetables, salads, and fresh fruits than people who have their own natural teeth.⁵

Because chronic diseases are so prevalent among older adults, many take multiple prescriptions and over-the-counter medications. It is not unusual for at least one of these medications to have a side effect that is detrimental to their oral health. For example, antihistamines, diuretics, antipsychotics, and antidepressants can reduce salivary flow. This can result in dry mouth, one of the most common side effects of both prescription and over-the-counter medications. Having a dry mouth can cause difficulty chewing, speaking, and swallowing. It also increases the risk of developing cavities and soft tissue problems. Dry mouth may also decrease the ability to wear dentures.

DISEASES RELATED TO MOUTH

Dental Caries : Dental cavities (caries), an infection of the teeth, represent another physiological burden, especially important for those whose systems are already weakened by diseases and aging. Decay untreated by a dentist usually gets worse, resulting in pain and the potential loss of teeth. Dental caries is one of the main causes of tooth loss for both young and old adults.

Periodontal Diseases : Periodontal diseases (gum diseases) are infections of the supporting structures of the teeth. When not treated, periodontal diseases can result in the loss of teeth. The prevalence of periodontal diseases increases with age, from 6 percent among persons 25-34 years to 41 percent among those 65 years and older.⁶ This increase is not necessarily due to older persons being more susceptible to periodontal diseases, but rather to

the consequences of these diseases (i.e., bone loss and gingival recession), which accumulate over time and are thus more evident in the elderly.⁷ Preventing periodontal diseases is particularly relevant because recent studies have shown a possible association between these diseases and diabetes and cardiovascular diseases, which are major causes of death among the elderly population.⁸

Oral cancer : Oral cancer, which includes lip, oral cavity, and pharynx cancer, is of particular concern for persons 65 years of age and older because they are 7 times more likely to be diagnosed with oral cancer than persons under 65 years of age.⁹

MASTICATORY FUNCTION AND NUTRITION IN OLDER ADULTS

Mastication is the first step in digestion and is absolutely essential to optimize dietary intake. Masticatory function in older individuals is influenced by two variables: the number and health of natural teeth and the functional status of dental prostheses. Older people tend to have fewer natural teeth and there are higher rates of edentulism (complete tooth loss) with increasing age. Many older people rely on dentures for oral function, and even those who are dentate may require either partial dentures or a full denture in one jaw opposed by some natural teeth. Poor oral health, especially poor periodontal health and edentulism, may negatively impact systemic health by disturbing nutritional intake.

Restoration of masticatory function by dental intervention alone will not necessarily lead to improved nutritional intake. Dental services should always be complemented by nutritional counsel, as has been confirmed in a recent clinical study where impaired chewing ability caused avoidance of hard and fibrous foods including fruits, vegetables and whole grains leading to a very low intake of non-starch polysaccharides and micronutrients.^{10,11}

IMPORTANCE OF DENTAL CARE

A visit to the dentist allows for a comprehensive evaluation of teeth, gums, and soft tissues, and for prevention, early detection, and treatment of oral health problems. For edentulous persons, a dental visit will include a comprehensive evaluation of soft tissues as well as an evaluation and possible adjustment of prostheses (denture). The trend in improved oral health status among persons 65 years of age and older is expected to continue as the new cohorts of older persons continue to be better educated, more affluent, and more likely to keep their natural teeth. This positive change in oral health status shows that oral diseases and tooth loss are not inevitable with aging, and that teeth can be expected to last in good condition

for all of a person's life.

However, the fact that the coming generations of elderly are maintaining their teeth poses a challenge for satisfying their dental care needs. As more people keep their teeth, more will be at risk for dental diseases and will need more preventive, restorative, and periodontal services.

Another challenge arises in providing dental care for older persons because their care is often more complex than dental care for younger adults. This complexity comes from the many changes associated with aging. Considering that caries and periodontal diseases, the most common oral health problems, are cumulative, older persons often endure the consequences of their oral health experience from earlier years, such as missing teeth, large fillings, and the loss of tooth support. These problems can be complicated by their decreased ability to care for their oral health. The elderly may also have multiple physical and psychological ailments that affect their treatment and require the dentist to have good medical knowledge and management skills.

CONCLUSION

During the past 50 years, the status of oral health and use of dental services among older people have improved somewhat. Although this trend is expected to continue as the population of older adults grows and increasingly maintains their natural teeth, continued improvement will also be dependent on access to appropriate dental care. Dental care alone will not be sufficient though, a greater public health awareness in the context of oral health will need to be generated and sustained through effective educational, capacity building and research interventions.

REFERENCES

1. *Oral Health in America: A report of the Surgeon General. Rockville, MD: U.S. Department of Health and Human Services, National Institute of Dental and Craniofacial Research, National Institutes of Health, 2000.*
2. *Age care statistics. [cited on 2007 Oct 6].*
3. *Indian J Community Med. 2008 October; 33(4): 214–218.*
4. *Int Dent J. 2001 Jun; 51(3): 212-8*
5. *Krall E, Hayes C, Garcia R. How dentition status and masticator function affect nutrient intake. JADA. 129:1261-1269, 1998.*

6. Brown L, Brunelle J A, Kingman A. Periodontal status in the United States, 1988-91: prevalence, extent, and demo-graphic variation. *Journal of Dental Research*. 75:672-683, 1996.
7. Page RC. Periodontal diseases in the elderly: a critical evaluation of current information. *Gerodontology*. 1:63-70,1984
8. U.S. Department of Health and Human Services. *Oral Health in America: A report of the Surgeon General - Executive summary*. Rockville, MD:U.S. Department of Health and Human Services, National Institute of Dental and Cranio-facial Research, National Institutes of Health, 2000
9. Ries LAG, Eisner MP, Kosary CL, Hankey BF, Miller BA, Clegg L, Edwards BK(eds). *SEER Cancer Statistics Review, 1973-1997*, National Cancer Institute. Bethesda, MD, 2000
10. American Dental Association, Chicago, American Dental Association Health Policy Resources Center. *Future of dentistry*. 2001
11. Administration on Aging, Washington, DC. *Profile of older Americans*. 2000

Dr. Shuchita Sharma is senior consultant Prosthodontist, practicing in the New Delhi area of India. She has a keen interest in public health with a deep commitment towards promoting dental healthcare and contributing to academics and research in the community.

VI. RECOMMENDATIONS

The study findings present the opportunities and gaps in order to address older people's health issues. While the study and its findings are strictly from a very remote, rural location, they would have some relevance for the urban elderly, especially living in resource-constrained settings such as slums. The recommendations are a result of findings generated

from various tools as well as from the ideas generated on the way forward from the community, service providers and experts from the medical field and government departments.

Strengthen and replicate VHW model

The VHWs have been used effectively in several healthcare spheres including maternal and child health, community eye care and nutrition. VHWs in the project POC have been used very effectively by GRAVIS with a focus on ageing. There is a great potential in furthering the model in remote communities where these VHWs can be effective health educators and referral linkages for older people. However, the training and capacity building processes must take a national approach in India and in other countries as per the relevance, keeping local characteristics in view. National Health Plans and policies on ageing must have adequate space and resources for taking this up. The role of civil society/NGOs in training and coordination of VHWs must be taken into focus and appropriate partnerships must be developed in this context.

Emphasis on self-care

Self-care certainly in a cost-effective approach with long-term benefits leading to a better health status of older people and reduced expenses on management of chronic health conditions such as hypertension and diabetes. While the research study in itself does not draw any positive lessons in this regard, GRAVIS and the research team take an encouraging note from self-care models promoted by several organizations, including the Tsao Foundation in Singapore under the SCOPE project. Self-care training models must be developed and promoted for older people and their caregivers. Again, the national plans and health policy will have to play an important role in it in active partnerships with NGOs.

Training of caregivers

Lack of training at the caregivers' level emerged as a major challenge and gap in the study findings. While the caregivers in the communities seem to be quite motivated to provide help and support to older people, their capacities and understanding need to be enhanced. Self-care trainings are one way of addressing it. Stronger connections between VHWs and caregivers will be the other effective means of an ongoing capacity building process.

Outreach medical services

Lack of healthcare in remote areas is clearly a major issue, and is more severe for older people whose mobility is usually impacted. Outreach medical camps run by GRAVIS, and other outreach mobile medical services such as Help Age India models have been quite effective. However, the focus of these camps should be equally on providing medical aid as well as raising the health awareness levels among the elderly and their caregivers. In India, NPHCE must take charge of this important intervention and should promote and replicate this activity with a proper national level planning. In countries similar to India, the model is very much applicable and must be considered.

Networking

A major gap in the context of age friendly healthcare is that there are several players working in isolation with partnership platforms. For example in India, the NPHCE and field level implementers including the NGOs and private practitioners do not have a good coordination. Networking between the government, old age health programmes, NGOs, private practitioners and the community of older people must be developed and sustained. Networking tools such as gatherings, meetings and consultations must be resourced and organized. This will not only improve the implementation as a result of better coordination, but will also include various voices in the planning and monitoring of interventions.

Continued focus on advocacy and research

Sustainability of developmental interventions and in particular community health programmes depend a great deal on continuing advocacy and research intervention. Advocacy and research on ageing and health have been given poor attention till date in India, and in many other parts of the world. This component must be strengthened with more resource allocation and, more importantly, through skill building of people/organizations working at the field level so that they could engage themselves in advocacy and research.

Age friendly healthcare to reach the older people living in the most remote and needy settings is a distant dream and will need integrated efforts. A holistic approach involving the above components will be helpful in the long-term with proper planning. The NGOs working at the field level as well as older people's groups including OPAs have an important role in this process and their participation in programmes must be ensured. Partnerships need to have a diverse nature and partners who have remained out of loop somewhat including private practitioners and pharmaceuticals must be brought to the board to utilize their potential. Last but not the least, the views of older people and their suggestions for the future must be

collected regularly in an ongoing manner. Needs and perceptions of communities' change and the programmes must have mechanisms to address those changes before it is too late.

VII. ABBREVIATIONS

BMI.....	Body Mass Index
EU.....	European Union
FDG	Focus Group Discussions
GRAVIS	Gramin Vikas Vigyan Samiti
HAI	Help Age International
HRqL.....	Health-related Quality of Life
IDOP	International Day for Older Persons
NGO	Non-governmental Organisation
NPHCE.....	National Programme for the Health Care of the Elderly
NPOP	National Policy on Older Persons
OPA.....	Older People's Association
PHC.....	Primary Health Centre
POC.....	Promoting older people-led community action to reduce poverty among vulnerable groups in rural Rajasthan
SC	Scheduled Caste
SCOPE.....	Self-Care for Older People
VHW	Village Health Worker
WHD.....	World Health Day
WHO	World Health Organisation

[illegible]

Gramin Vikas Vigyan Samiti (GRAVIS) or Center of People's Science for Rural Development is a non-governmental, voluntary organization that takes a Gandhian approach to rural development by working with the poor of the Thar Desert to enable them to help themselves. Since its inception in 1983. GRAVIS has worked with over 55,000 desert families across over 1,200 villages in Rajasthan reaching a population of over 1 million, and has established over 2,500 Community Based Organizations (CBOs). Through its dedicated field work, as well as its research and publications, GRAVIS has come to occupy a leading position amongst the voluntary organizations in the region.

Gravis

3/437, 3/458, MM Colony, Pal Road,
Jodhpur - 342 008 Rajasthan, India.

Phones : 91 291 2785 317, 2785 116

Fax : 91 291 2785 116

Email : email@gravis.org.in

www.gravis.org.in

© 2013 GRAVIS

All rights reserved