UTILIZATION OF PUBLIC HEALTH SERVICES
BY OLDER WOMEN IN PUNJAB, PAKISTAN

A collaborative initiative of
HELPAGE INTERNATIONAL PAKISTAN
&
HEALTH SERVICES ACADEMY, ISLAMABAD

Ministry of Health Services & Regulation, Government of Pakistan

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With the Financial Support of United Nations Population Fund
The research Team constituted of:

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2) **Dr. Nazish Masud** as Principal Investigator/Project Manager  
3) **Dr. Mehreen Mujtaba** as Co-investigator  
4) **Dr. Erum Zafar Malik** as Co-investigator  
5) **Dr Mohammad Yousaf Rajput** as Researcher  
6) **Ms Naveeda Iqbal** as Researcher  
7) **Ms. Aiman Saleemi** as Data management assistant

**DISCLAIMER:**  
The data and results collected by the Research Team is all the secondary data collected through various sources. The team is not responsible for the validity and quality of the data; it is assumed that data collected by all the parent institutions and/or departments will be of a good quality.

The opinion and recommendations proposed are entirely by the Research Team and does not necessarily reflect the official policy of the supporting organizations.

This study was commissioned by the financial support of HelpAge and conducted by an independent team of researchers; there has been no conflict of interest in collecting and presenting the findings.
Acknowledgment

The Research Team wishes to acknowledge the support extended by HelpAge International, Pakistan and Health Services Academy. This research could not have been completed by the continuous support and guidance of Dr. Assad Hafeez, the Executive Director of the Health Services Academy.

Special thanks to Ms. Ajeeba Aslam, Country Director and Mr. Waqas Ashfaq Qureshi from HelpAge for their efforts and coordination in realizing this study. Our study could not have been completed if we do not pay a big tribute to Dr. Rasheed Akhtar and Ms. Arooj Fatima from the Provincial MIS Cell for sharing the data. In addition we are also indebted to Medical Superintendent and/or Executive Directors of all the tertiary care hospitals who facilitated in our data collection.

The Team also thanks all the support, administrative and finance departments of the Heath Services Academy for offering their support. In the end a special thanks to all the data collection team.

We also recognized the financial support of United Nations Population Fund for carrying out this study.

Dr. Nazish Masud
Principal Investigator and Team Leader
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<tr>
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<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSA</td>
<td>Health Services Academy</td>
</tr>
<tr>
<td>UV</td>
<td>Uretero-vaginal</td>
</tr>
<tr>
<td>DHIS</td>
<td>District Health Information System</td>
</tr>
<tr>
<td>ENT</td>
<td>Ear Nose Throat</td>
</tr>
<tr>
<td>Gyne</td>
<td>Gynecology</td>
</tr>
<tr>
<td>OPD</td>
<td>Outpatient Department</td>
</tr>
<tr>
<td>PHC</td>
<td>Primary Health Care</td>
</tr>
<tr>
<td>PID</td>
<td>Pelvic inflammatory disease</td>
</tr>
<tr>
<td>PIMS</td>
<td>Pakistan Institute of Medical Sciences</td>
</tr>
<tr>
<td>UNFPA</td>
<td>United Nations Population Fund</td>
</tr>
</tbody>
</table>
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Executive summary

A secondary data analysis of the existing data was conducted in October 2013 to access the utilization of Public healthcare facilities by older women i.e. 50 years and above in Punjab Province of Pakistan. All the primary and secondary care facilities of Punjab province were included in this study and the data regarding the utilization of services was collected from the DHIS. At the tertiary care facility the focus was only the admitted female patients 50 years and above in the Gynecology wards of four selected Hospitals only.

Data from DHIS was extracted for the last one year from August 2012 to July 2013, and three representative months were selected to access the trends and seasonal variations. The primary and secondary health care facilities were selected to access the differences in the utilization trends among older male and females. While the tertiary care facility focus was to access the gynecological problems of the older women only.

Amongst the total people coming to utilize Public health care services 20.5% at primary level and 25% at secondary level facilities were older. There was slight difference in male to female utilization ratios at secondary level with percentage of females slightly higher than males with 13.45% and 11.6% respectively. While for primary level it was almost the same with 10.27 % females and 10.29% males.

The most commonly visited department by the older male and females at secondary care level was the Eye Unit i.e. (41% males and 39 % females) followed by Orthopedic and Medical Department. The comparison of the total number of patients seen in all the departments showed that women were reporting more in the OPD while male were reporting more in the Accident and Emergency Departments.

Seasonal variation and changes in the trends of utilization of services were noted and decrease in the average number of patients was noted during the month of August which was the month of fasting. Amongst the older women admitted at the tertiary care facility the Pelvic Inflammatory disease was the almost common cause of admission for older women followed by Urtero-Vaginal prolapse.

This exploratory study though highlights the utilization proportions, trends and probable causes of health problems in older, especially the women in Punjab, but it also necessities that community based research need to be done for these special groups for identifying the burden of health problems and health seeking behavior. These finding needs to be shared in media and also advocacy campaigns be launched for focusing more attention to the older at levels of care of facilities as Pakistan will soon have to bear a very large burden of the older people. In addition, special attention needs to be given for uplifting of the services in the Eye and Orthopedic Departments available at the hospitals for older women and men problems. Also opportunities for public private partnership in terms of organizing Eye camps should be explored at rural areas.
1 BACKGROUND & INTRODUCTION OF THE PROJECT

1.1 BACKGROUND

The number and proportion of older people is increasing in both the developed and less developed countries as a result of improved health facilities. Increasing longevity is one of humanity's greatest achievements. Population ageing is considered to be one of the most challenging demographic events in the 21st century. It presents many important socio-economic and demographic implications, along with challenges in terms of economic activities. These challenges are not only faced at the individual, family and community level but at a global level as well. Considering the importance of ageing population an International Plan of Action on Aging was adopted by United Nations (UN) in 1982. Afterwards a set of principles for aging women was adopted by UN general assembly in 1991.

Ageing is a natural progression in the life cycle. It is marked not only by anatomical, physiological, psychological changes but also accompanied by social and economic changes. Biological aging refers to anatomical and physiological changes and requires input from society to meet the additional demands for health and wellbeing of the older population. Psychological aging consists of a general decline in the mental abilities that accompany old age. In less developed countries the proportion of older people is increasing at a slower rate compared to developed countries because of elevated fertility rates but the numbers however are on the rise. With ageing population the numbers of older people with chronic conditions like heart disease, cancer, trauma dementia and Alzheimer disease etc. are also increasing.

The changing demographic structure in many of the developing countries has resulted in a rapid increase in the proportion of the older population. Additionally, many of the middle and low income countries are experiencing an epidemiological transition from communicable to non-communicable diseases. The percentage of the older people i.e. 60 years and above in 1980 was 8.5 percent which is at 11 percent, or 613 million people. By the end of year 2020 there will be one billion older people, and 71 percent of them would be living in the less developed countries. The older people are more vulnerable to health problems including infections and accidents, as their diet and nutritional status act jointly with these conditions.

The gendered nature of aging reveals that women tend to live longer than men. Gender relations structure the entire life cycle, from birth to old age, influencing access to resources and opportunities and shaping life choices at every stage. Good health, economic and social security and adequate housing are essential requirements of aging with dignity, but older women in both developed and developing countries face difficulties in accessing these on a basis of equality with men. Both men and women face discrimination due to old age, but women face aging differently. Gender and age discrimination make the life of an older woman more difficult, as their rights are often

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1 Mohan 2004
violated. Many older women face neglect as they are considered no longer economically or reproductively useful, and are seen as burdens on their families. In addition, widowhood, divorce, lack of care-givers for older women, post-menopausal difficulties and absence of geriatric medicine and health care are other grounds of discrimination that prohibit older women from enjoying their human rights.3

1.2 INTRODUCTION

1.2.1 Pakistan context

According to a recent report by United Nations Population Fund (UNFPA) and HelpAge International the number of people over 60 will be reaching 2 billion by 2050, which is 15.1% of the total population.4 Pakistan is sixth most populous country in the world and is among one of those fifteen countries in the world where people over 60 are more than 10 million. It is estimated that 6.5% of the total population of Pakistan is over 60 years old with a figure of 11.7 million and this figure is expected to rise to 43.3 million by 2050, when people over 60 will be around 16% of the total population of Pakistan.5 HelpAge International and UNFPA have recently ranked Pakistan 89 out of 91 countries in the Global Age Watch Index. This index ranks countries based on four key domains that enable old people’s well-being, i.e., their income security, health status, education and employment, and the presence of enabling societies and environments.6 Older women are less likely than older men to utilize healthcare services as demonstrated by a large study regarding health care utilization by older people in India.7 Furthermore, studies highlight that gynecological problems exist even after the reproductive years of women. In developing countries where inadequate medical care is offered, especially for women, the move towards menopause and beyond puts them at risk of symptoms associated with hormonal changes, heart disease, gynecological malignancies, osteoporosis and other genitourinary conditions.8

1.2.2 Punjab context

Punjab is the most populated province of Pakistan; home to approximately 56% of the country’s population.9 In 2011 the total population of male was 48.75 million and females 44.25 million. There are total of 2467 Basic health Units (BHU), 295 Rural health centers (RHC), 84 Tehsil Headquarter Hospital (THQ), 33 District Headquarter C.L. Estes and K.W. Linkins, Devolution and Aging Policy: Racing to Bottom in Long term Care”, International Journal of Health Services, 1997, 27, pp.427-442.

4 First ever index to measure the wellbeing of elderly people | Global AgeWatch Index
http://www.helpage.org/global-agewatch/

5 Country ageing data | Data | Global AgeWatch Index
http://www.helpage.org/global-agewatch/population-ageing-data/country-ageing-data/?country=Pakistan

6 First ever index to measure the wellbeing of elderly people | Global AgeWatch Index
http://www.helpage.org/global-agewatch/


9 Population situation of Punjab
Hospital (DHQ), 12 Civil hospitals and 19 Tertiary/teaching care hospitals across 36 districts of Punjab. However the access to availing services and quality of care at the public healthcare facilities remains an issue. It becomes even harder for older people who have limited or no secure income and suffers from mobility related problems to access these facilities/services. Older women who are victims of these issues face social, cultural, financial and a number of other barriers to accessing health and are deprived of this basic right.

1.2.3 Rationale of the Study

The absence of health data related to causes of morbidity and mortality in post-menopausal women remains a challenge for policy makers across the developing world. Reliable data is needed for appropriate policies/reforms and for developing a plan for uplifting the health and socioeconomic status of older people. In the less developed countries including Pakistan, there is lack of relevant and reliable information. This calls for research studies to be conducted aiming at elucidating the magnitude as well as causes of morbidity in older women. HelpAge International and Health Services Academy, Pakistan have therefore collaborated to determine the utilization of government health services by older women in Punjab, Pakistan; also gynecological complaints of older women in the tertiary care hospitals have also been identified in this study.

This study provides the estimates of utilization of government health services by older women, especially for gynecological complaints in the most populous province of Pakistan. Based on our findings, we have recommended strategies to increase awareness regarding special care to older women, as well as suggested mechanisms to provide appropriate services for common as well as gynecological problems at all levels of the health care system.

2 AIM AND OBJECTIVES

Aim of this study is to improve the health status of older women in Pakistan.

2.1 PRIMARY OBJECTIVE:

1. Primary objective of this study is to assess the utilization of public health services by older women in Punjab, Pakistan for their various health related complaints.

2.2 SECONDARY OBJECTIVES:

The secondary objectives of the study are to:

1. Determine the presence or absence of any significant difference in terms of frequency of utilization of government health services between older men and women in out-patient departments/services at primary and secondary levels of services where DHIS data is regularly collected.
2. Identify the trends of gynecological problems in older women reporting to selective tertiary care hospitals.

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10http://health.punjab.gov.pk/?q=Services_Package
11DHIS quarterly report 2012 First quarter.
3 RESEARCH DESIGN AND METHODOLOGY

3.1 Design
A secondary data analysis of the data collected through District Health Information System (DHIS) and various tertiary care hospitals of Punjab province was done during this study.

3.2 Study Population
The retrospective data review method was used to determine the utilization of government health care services in Punjab Province by older people. At primary and secondary healthcare facility levels the data for both males and females (50 years and above) was included. Whereas for tertiary care level only females (50 years and above) who had been admitted due to gynecological problems were included in the study. Figure 1 illustrates geographical locations of all the districts on Punjab.

![Figure 1: Map of Punjab Province](image)

3.3 Data Source
Two sets of data were collected and analyzed

3.4 For Primary and secondary care level facility
Existing DHIS data of Punjab Province was the main data source for this study.

3.5 For Tertiary care level facility
The data available in the Admission and Operation Theater Registers of the Gynecological wards of four Tertiary care Hospitals which were purposely selected was collected. The four hospitals included in this study were:
   a) Rawalpindi district (Northern Punjab) Holy family hospital,
   b) Islamabad capital territory (Pakistan Institute of Medical sciences),
   c) Lahore (Central Punjab) (Ganga Raam Hospital) and
   d) Multan (Southern Punjab) Nishter Hospital.

3.6 Data Extraction Tools
For designing of the data extraction tools the already available DHIS forms for data entry of the Primary and secondary care healthcare facilities were considered and the variables of interest were selected from them. Whereas for tertiary care level facility
data extraction, a tool was designed just in line with the primary and secondary health care level tools but with prime focus on the indoor patients in the Gynecological wards specifically. Three tools were used for data collection.

1) Data collection tool for primary level facility, given in.
2) Data collection tool for secondary level facility, given in.
3) Data collection tool for tertiary care facility, given in.

3.7 Variables of interest
The main variables which were considered during this study were

• Total number of Male and female patients 50 years and above seen in the Out Patient Departments OPDs, (for Primary and Secondary level).
• Total number of female patients 50 years and above admitted in the Gynecological ward at Tertiary care level care hospitals.
• The problems/diseases for which the older women were admitted in Gynecological ward.

3.8 Data management
Data extracted from DHIS was rechecked and confirmed for presence of any errors or mistakes and corrections were done accordingly. From all the data collected for tertiary care hospitals 10% data was rechecked by the Principal Investigator for reliability and quality assurance. All the concerned data was entered in computer and kept secured through password protected computer files; also the paper version of the forms has been kept secured with the Principal Investigator.

3.9 Data Analysis
The data collected was entered into Microsoft Excel. Descriptive statistics were performed for variables and the results were depicted in terms of percentages, total numbers and ratios. Trends analysis was done for the gynecological morbidity in tertiary care hospitals. For comprehensive viewing of the results, tables and charts were also used.

3.10 Ethical Consideration
The formal approval from the Ethical Review Committee of the Health Services Academy was taken for execution of this research.

3.11 Limitations
Although the disease specific data in DHIS is available for primary and secondary level facilities but it could not be utilized during this study because of in DHIS cumulative numbers for certain disease are reported and age wise classification of disease could not be extracted. Also the district specific data for the different groups is also not available.

The information which is entered in the admission registers is also not sufficient and age and disease specific segregation of the information cannot be done. Hence the valuable information cannot be utilized for research purposes. This should be looked in at the province level and modification should be done accordingly.
4 RESULTS AND FINDINGS
Data for the Public health care facilities of Punjab was extracted for the last one year i.e. from August 2012 to July 2013. Three representative months were selected and only data for the month of August, January and May were utilized during this study. For the Primary and Secondary healthcare facilities of Punjab, the existing provincial data in the District Health Information System (DHIS) was taken as a data source. Whereas for the tertiary care level facilities the data source was the information present in the Admission and Operation Registers of the Gynecological ward.

4.1 Overall OPD Utilization
The data extracted from DHIS showed that on an average 3.8 million people per month come to utilize primary and 1.7 million at secondary level public health care facilities across 36 districts of Punjab province. The average number of older people who utilized these facilities on monthly basis was approximately 0.78 million and 0.436 million for primary and secondary care facilities respectively. The percentage of older people seeking care from primary care facilities was 20.5%. However at the secondary care level it was 25% of the total (both male and females of all age groups) utilizing the services.

\[ \text{Percentage of elderly} = \frac{\text{Total elderly males} + \text{elderly females}}{\text{Total male and female seen all ages}} \times 100 \]

Figure 2: Percentage of older people amongst the total

4.2 Primary Health care utilization
At PHC facilities on an average 1.5 million males and 2.3 million females of all age group availed the services. The average older people utilizing these facilities was 0.788 million, out of these 394631 were older males and 394014 were older females. Summary of the details is given in the table1 below.

---

14The percentage of elderly = Total elderly males + elderly females x 100
Total male and female seen all ages
### Table 1: Total number of male and female seen during the three representative months

<table>
<thead>
<tr>
<th>SEEN IN OPD</th>
<th>MONTHS</th>
<th>Total numbers</th>
<th>Average /month</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>AUGUST 2012</td>
<td>JANUARY 2013</td>
<td>MAY 2013</td>
</tr>
<tr>
<td>No. of Male (new cases) 50+</td>
<td>365,033</td>
<td>412089</td>
<td>406,772</td>
</tr>
<tr>
<td>No. of Female (new cases) 50+</td>
<td>364,850</td>
<td>407829</td>
<td>409,363</td>
</tr>
<tr>
<td>No. of Male Total (all ages)</td>
<td>1,834,926</td>
<td>748416</td>
<td>1986954</td>
</tr>
<tr>
<td>No. of Female Total (all ages)</td>
<td>2,222,656</td>
<td>2224249</td>
<td>2487824</td>
</tr>
</tbody>
</table>

### 4.2.1 Male and female percentages

At Primary healthcare facilities no major difference was noted in older male to female distribution. The percentage distribution of male: female was almost similar i.e. 10.27%:10.29% respectively. The figure 3 summaries the percentages of older male and females seen per month.

![Figure 3: Older male and female utilization at Primary health care level](image)

### 4.2.2 Seasonal variations

Over all comparison of the three representative months of August January and May showed clear seasonal variation in utilization of OPD services at the primary level facilities. In the month of August there was general decline in the total number of patients as well as older coming to avail services. August was the Holy month of Ramadan during which fasting is observed.

![Figure 4: Seasonal variation the utilization of services at Primary level facility](image)

---

15 The percentage of elderly male/female utilization = \( \frac{\text{Total elderly males /female}}{\text{Total male and female seen all ages}} \times 100 \)

16 The holy month during which Muslims all over the world observe fasting.
### 4.3 Secondary Healthcare facility Utilization

The DHIS data for secondary care facilities of Punjab Province was extracted for all departments i.e. Outpatient Department (OPD), Medicine, Surgery, Eye, ENT, Orthopedics, Psychiatry, Dental, Skin, Gynecology and Emergency/causality.

#### 4.3.1 Burden of Older people at secondary care facilities

On an average 1737428 people of all age groups availed these services on monthly basis from secondary care facilities out of which 436190 were older people 50 years and above. Hence older people comprised of the 25% of the total patients seen in OPD of different departments in a month.

Whereas on an average 14,500 older people were seen in the OPD’s on a daily basis. Irrespective of the specialties which were utilized the average per month visits by older male and females were 202492 and 233698 respectively. Whereas the percentage of older females seen in a month were 13.4% compared to older men were only 11.6 %. The data for the three representative months of older male and females seen in the OPD are given in the table 2.

<table>
<thead>
<tr>
<th>S NO</th>
<th>DEPARTMENT</th>
<th>MALE (Aug-12)</th>
<th>MALE (Jan-13)</th>
<th>MALE (May-13)</th>
<th>FEMALE (Aug-12)</th>
<th>FEMALE (Jan-13)</th>
<th>FEMALE (May-13)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>50 yrs +</td>
<td>50 yrs +</td>
<td>50 yrs +</td>
<td>50 yrs +</td>
<td>50 yrs +</td>
<td>50 yrs +</td>
</tr>
<tr>
<td>1</td>
<td>OPD</td>
<td>47,201</td>
<td>54,271</td>
<td>61,502</td>
<td>69,993</td>
<td>55,529</td>
<td>64,820</td>
</tr>
<tr>
<td>2</td>
<td>Medicine</td>
<td>27,133</td>
<td>31,490</td>
<td>34,543</td>
<td>34,172</td>
<td>30,747</td>
<td>48,244</td>
</tr>
<tr>
<td>3</td>
<td>Surgery</td>
<td>11,907</td>
<td>11,318</td>
<td>13,964</td>
<td>10,579</td>
<td>10,565</td>
<td>13,483</td>
</tr>
<tr>
<td>4</td>
<td>Eye</td>
<td>17,509</td>
<td>18,590</td>
<td>30,252</td>
<td>17,844</td>
<td>19,423</td>
<td>31,763</td>
</tr>
<tr>
<td>5</td>
<td>ENT</td>
<td>6,071</td>
<td>6,253</td>
<td>7,744</td>
<td>5,343</td>
<td>7,289</td>
<td>7,697</td>
</tr>
<tr>
<td>6</td>
<td>Orthopedics</td>
<td>5,549</td>
<td>6,965</td>
<td>9,342</td>
<td>4,465</td>
<td>7,094</td>
<td>9,847</td>
</tr>
<tr>
<td>7</td>
<td>Psychiatry</td>
<td>2,358</td>
<td>2,012</td>
<td>1,877</td>
<td>2,499</td>
<td>1,846</td>
<td>2,574</td>
</tr>
<tr>
<td>8</td>
<td>Dental</td>
<td>8,926</td>
<td>8,595</td>
<td>10,900</td>
<td>6,956</td>
<td>8,887</td>
<td>12,447</td>
</tr>
<tr>
<td>9</td>
<td>Skin</td>
<td>5,410</td>
<td>5,969</td>
<td>5,181</td>
<td>4,622</td>
<td>5,063</td>
<td>6,051</td>
</tr>
<tr>
<td>10</td>
<td>Gyne/Obs</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>16,361</td>
<td>21,198</td>
<td>25,551</td>
</tr>
<tr>
<td>11</td>
<td>Emergency</td>
<td>50,760</td>
<td>48,656</td>
<td>55,230</td>
<td>52,364</td>
<td>41,222</td>
<td>44,555</td>
</tr>
<tr>
<td></td>
<td>Grand total</td>
<td>182,824</td>
<td>194,119</td>
<td>230,535</td>
<td>225,198</td>
<td>208,863</td>
<td>267,032</td>
</tr>
</tbody>
</table>

**Table 2: Total older male and female seen in OPD**
4.3.2 Departmental Trends of Utilization at secondary level

Amongst the total number of patients reporting to a department the trend of utilization of individual department showed the highest percentage of older male and female (50yrs and above) were utilizing the secondary health care services for Eye problems i.e. 41.4% males and 36.8% females. Also it was noted that Orthopedic and Medicine Departments were second most utilized departments by older people. The percentage utilization for medicine department was 30.8% men and 30.4% for females. The male to female utilization trends were almost very similar for most of the other departments i.e. ENT, skin, dental and psychiatry for both male and female. The older women having gynecological problems were only 13.5%. The details of older people seen in the individual departments of secondary care facilities across Punjab are given in table 3.

<table>
<thead>
<tr>
<th>S no</th>
<th>Departments</th>
<th>% Male Utilization</th>
<th>% Female Utilization</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Eye</td>
<td>41.40%</td>
<td>36.80%</td>
</tr>
<tr>
<td>2</td>
<td>Medicine</td>
<td>30.80%</td>
<td>30.40%</td>
</tr>
<tr>
<td>3</td>
<td>Orthopedics</td>
<td>30.50%</td>
<td>31.90%</td>
</tr>
<tr>
<td>4</td>
<td>Psychiatry</td>
<td>27.20%</td>
<td>25.80%</td>
</tr>
<tr>
<td>5</td>
<td>OPD</td>
<td>26.60%</td>
<td>26.20%</td>
</tr>
<tr>
<td>6</td>
<td>Dental</td>
<td>24.70%</td>
<td>21.20%</td>
</tr>
<tr>
<td>7</td>
<td>Surgery</td>
<td>24.60%</td>
<td>24.40%</td>
</tr>
<tr>
<td>8</td>
<td>Emergency</td>
<td>22.50%</td>
<td>22.70%</td>
</tr>
<tr>
<td>9</td>
<td>Skin</td>
<td>21.50%</td>
<td>18%</td>
</tr>
<tr>
<td>10</td>
<td>ENT</td>
<td>20%</td>
<td>21.30%</td>
</tr>
<tr>
<td>11</td>
<td>Gynecology</td>
<td>0</td>
<td>13.50%</td>
</tr>
</tbody>
</table>

Table 3: Percentage utilization of all departments by older people in Punjab province at secondary level facility

Figure 6: older Male and female departmental trend of utilization.
4.4 Comparison of Male and Female seen in OPD (at Primary and Secondary levels of services)

In line with the study objectives the comparison of total older male and female seen in OPD at primary and secondary care levels was done to see any significant differences between male and female in the utilization of these public care facilities. Results showed both at primary and secondary care level facilities the percentage of older male and female seen on monthly basis in the OPD was similar for both sexes. At primary level the total number of older people seen in a month the sex segregation showed older male was 49.9% and females were 50%. However the percentage of older female (13.45 %) coming to avail secondary care services was slightly higher compared to older male (11.6 %). The comparison of percentage of older male and females seen monthly at primary and secondary healthcare levels is given in the figure 5 below.

\[
\text{Percentage} = \frac{\text{total male/female} \geq 50 \text{ yr for the month}}{\text{Grand total all ages ( Male +female) new cases per month}} \times 100
\]

Figure 7: Male and female utilization trends

4.5 Tertiary Healthcare Utilization by older women

The data from four tertiary care hospitals which were purposively selected was included and analyzed for this study. The three hospitals were from Punjab Province (Nishtar, Sir Ganga Ram, Holy family) and one from Federal Capital (PIMS).

Analysis of the data collected from the tertiary care hospitals showed that on an average 416 older women were admitted in each hospital on monthly basis. Out of all the surgeries performed monthly in the Gynecology wards almost 75 major surgeries and 108 minor surgeries were performed on older women aged 50 years and above for various Gynecological problems.

\[\text{Percentage} = \frac{\text{total male/female} \geq 50 \text{ yr seen for the month}}{\text{Grand total all ages ( Male +female) new cases per month}} \times 100\]
Table 4: Summary of admission and surgeries of older women in tertiary care facility

4.6.1 Gynecological problems among elder women
The five most common provisional diagnosis for which these women were admitted are as follows:

a. Pelvic Inflammatory disease/Infection
b. Fibroid
c. Utero-vaginal prolapse
d. Vasico-vaginal fistula
e. Carcinoma Genital Tract.

Pelvic Inflammatory disease/infections was seen amongst 12.2% of the total patients admitted on monthly basis in each hospital, while the Fibroid was the second most prevalent among admitted patients i.e. 10.8%. However 0.4% older women were admitted with some kind of genital tract cancer on monthly basis. Utero-vaginal prolapse was another most prevalent complaint by older women. The percentages for all gynecological problems are given in the figure 3 below.

![Figure 8: Percentages of all gynecological problems](image)

4.6.2 Seasonal variation in surgeries performed
Overall the seasonal variation in the surgeries performed is not this much big still both for major and minor gynecological surgeries a general decline was noted in the total number during the month of August, and the number of surgeries performed during May was significantly higher compared to January.
5 CONCLUSION AND DISCUSSION

Old age represents an intriguing aspect of the human life cycle. The desire for longevity is also interlinked with a wish to avoid the consequences of aging, whether they are physiological or psychological. In developing countries, where there is a patriarchal society, older women are at a clear disadvantage. Most women don’t own property, and are completely dependent on the male members of their family. Multiple forces determine how much health care people use, the types of health care they use, and the timing of that care. Some forces encourage more utilization; others deter it. Increase in the prevalence of chronic disease, may have contributed to increases in overall utilization. Aging is also associated with increased health care utilization.  

In this study the secondary data analysis showed that burden of older people at the primary healthcare level was 20% whereas at secondary level facilities it further increased to 25% i.e. one fourth of the total OPD patients were 50 years and above. Also it was observed that the percentage of older female utilizing the secondary level facilities was little higher compared to males. The departmental percentage of utilization showed that many older people had eye problems for which they were coming to hospitals. Also pelvic inflammatory diseases and fibroid were the main cause of admission into tertiary care hospitals by older people.

Based on our analysis, this study provides a unique insight on the health service utilization by older people, as Pakistan is also experiencing ageing population. Our results reveal that at Primary Healthcare level, the male to female ratio of service utilization is the same. Out of the total older people availing the OPD services in

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Primary health care 10.27% and 10.29% were female and male respectively. DHIS quarterly report for 2012 reveals the same findings, where in age and gender wise analysis of the utilization of services, the number older male and female patients is same at 10.5% and 10.9% respectively. The difference was observed at the child bearing age where utilization of services by females was significantly higher than their male counterparts.

An interesting facet revealed by this study was a higher percentage, i.e. one fourth (25%) of the entire OPD in the secondary healthcare facility being utilized by older people. The maximum patients were requiring treatment for various eye problems followed closely by orthopedic problems; relatively higher percentages were older women as compared to males. These findings are in line with the findings of other studies done in Pakistan. The reason may be that the older women have been reported to have an increased prevalence of cataract due to prolonged exposure to cooking with biomass fuels.

Our study clearly showed that higher percentages of older women are utilizing the secondary level facilities. A number of studies have been conducted all over the world which supports the same finding and different explanations have been given for the higher utilization of health-care services by females. Females generally live longer than males but still report greater morbidity and disability and utilize healthcare facilities more at the later part of their lives. However the higher healthcare utilization trend by females is not a constant finding and it depends on the type of healthcare facility as well. Women are likely to use preventive and diagnostic services more often, while men utilize emergency services more. Although women are utilizing the OPD services more but still the studies have shown that men hospitalization rate is higher compared to females.

Utilization of health services by women and men differs according to the health problem for which care is required. Our study shows that older men reporting to Emergency Department more rather than regular OPD. The reason for this could be the fact that older men in less developed countries are much more likely to work than those in industrialized nations and they are not able to utilize the services during regular OPD timings. Older people in predominantly rural societies often work out of necessity. In nations as diverse as Bangladesh, Indonesia, Jamaica, Mexico, Pakistan,

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19 DHIS quarterly report 2012 First quarter
22 Sendino et al. Gender differences in the utilization of health-care services among the older adult population of Spain. J Bio Med Central; September 2005
and Zimbabwe, more than 50 percent of all older men are considered economically active.\textsuperscript{24}

Our study also reveals that almost 26.5\% of the population reporting to the Psychiatry OPD is older. The finding is pretty similar compared to other studies conducted in India. Research shows that all over the world older women are prone to osteoporosis, arthritis, cervical and breast cancers, anemia and most frequently but not realized severe depression. Point prevalence of depressive disorders in the older population of the world varies between 10\% and 20\%, depending on cultural situations.\textsuperscript{25}

At Tertiary care facility the focus of our study was older women’s utilization of the in-patient gynecological services. The Pelvic inflammatory disease is the most prevalent disease among the older people admitted patients in tertiary care hospitals. And on the second place comes the Fibroid and then Utero-Vaginal prolapse. This finding is similar to studies done in Pakistan as well as other developing countries.\textsuperscript{26} Additionally, many of the middle and low income countries are experiencing an epidemiological transition from communicable to non-communicable diseases.\textsuperscript{27} As contrary to West where percentage of Genital carcinoma is very high in our country its incidence is very low; this may be due to religious reasons and our culture practices.\textsuperscript{28} Studies have also shown that many people do not know when they need care and what the optimal time to seek care is, and many conditions are not easily diagnosed or treated. If all people could obtain unlimited health care, perceived need by both patient and provider might be the only determinant of health care utilization, but unfortunately barriers to needed care, such as availability or supply of services, ability to pay, or discrimination, have an impact on utilization overall.\textsuperscript{29}

6 Recommendations and Way forward

- This exploratory study conducted reveals some of the interesting findings; it is recommended that this study may be conducted in all other provinces and special areas of Pakistan. The paucity of the data though has been partially addressed by the current DHIS, but as has been noted, there are some limitations in further disaggregating the data.
- The health care utilization data can only suggest the proportions and trends of older people health seeking behavior; this can be considered as a tip of ice-berg as these are the ones who can manage and were motivated and supported enough to visit the health facilities. Therefore it is high time that the community based survey related to disease prevalence and health seeking behaviors should categorically include both the sexes and ages of these groups so as to identify the real magnitude of the problem.
- Considering that older male and female were utilizing the Eye and orthopedic

departments mostly some special provision should be given for older people in these wards e.g. separate allocated rooms for older people inside these departments so as to facilitate the older people while availing services.

- Also considering the high turnover of older people with eye problems possibility of public private partnership should be explored in terms of organizing eye camps in the Primary healthcare facilities on quarterly or two monthly bases which can decrease the significant turn over at the secondary care facility levels.

- At the tertiary care level considerable number of Pelvic Inflammatory Disease cases were identified, which not only affect the quality of life, but also attention has to be given to improve the diagnosis of this problem in the tertiary care settings.

- It is also recommended that promotive and preventives programme be also designed for addressing the forthcoming magnitude of the problem in Pakistan; it is high time that that their issues are highlighted in the media and advocacy campaigns be launched.
# Annexure 1: Primary Health care level Data extraction tool

**DATA EXTRACTION TOOL FOR PRIMARY HEALTHCARE LEVEL FACILITY**

<table>
<thead>
<tr>
<th>Codes</th>
<th>Name of the researcher</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Please circle one as appropriate</td>
</tr>
<tr>
<td>1.</td>
<td>Mr. Waqas</td>
</tr>
<tr>
<td>2.</td>
<td>Ms. Saima</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Variable no.</th>
<th>Name of the variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
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<td></td>
<td>District Name : To be classified into codes later: total 36 codes</td>
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<td>2.</td>
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<td>1. Urban</td>
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<tr>
<td></td>
<td>2. Rural</td>
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<td>3.</td>
<td>Total female patients seen in OPD (50 years and above) for the three representative months</td>
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<td></td>
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<td>4.</td>
<td>Total Male patients seen in OPD (50 years and above) for the three representative months</td>
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Annexure 2: Secondary level data extraction tool

DATA EXTRACTION TOOL FOR SECONDARY LEVEL FACILITY

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<td>Mr. Waqas</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Ms. Saima</td>
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<td>2.</td>
<td>Location of the facility</td>
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<tr>
<td></td>
<td>Select one as appropriate</td>
<td>2. Rural</td>
</tr>
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<td>3.</td>
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<tr>
<td>4.</td>
<td>Total female patients seen in Surgery OPD (50 years and above) for the three representative months</td>
<td>Please write total numbers</td>
</tr>
<tr>
<td>5.</td>
<td>Total Male patients seen in Surgery OPD (50 years and above) for the three representative months</td>
<td>Please write total numbers</td>
</tr>
<tr>
<td>6.</td>
<td>Total female patients seen in Medicine OPD (50 years and above) for the three representative months</td>
<td>Please write total numbers</td>
</tr>
<tr>
<td>7.</td>
<td>Total Male patients seen in Medicine OPD (50 years and above) for the three representative months</td>
<td>Please write total numbers</td>
</tr>
<tr>
<td>8.</td>
<td>Total female patients seen in Eye OPD (50 years and above) for the three representative months</td>
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<td>9.</td>
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</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
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</tr>
<tr>
<td>10.</td>
<td>Total female patients seen in ENTOPD (50 years and above) for the three representative months</td>
<td>Please write total numbers</td>
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<tr>
<td>11.</td>
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<tr>
<td>12.</td>
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<td>13.</td>
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<tr>
<td>14.</td>
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<td>Please write total numbers</td>
</tr>
<tr>
<td>15.</td>
<td>Total Male patients seen in Psychiatry OPD (50 years and above) for the three representative months</td>
<td>Please write total numbers</td>
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<tr>
<td>16.</td>
<td>Total female patients seen in Orthopedics OPD (50 years and above) for the three representative months</td>
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<td>17.</td>
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<td>Please write total numbers</td>
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<tr>
<td>18.</td>
<td>Total female patients seen in Emergency (50 years and above) for the three representative months</td>
<td>Please write total numbers</td>
</tr>
<tr>
<td>19.</td>
<td>Total Male patients seen in Emergency (50 years and above) for the three representative months</td>
<td>Please write total numbers</td>
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</table>
Annexure 3: tertiary level data extraction tool
DATA COLLECTION TOOL FOR TERTIARY CARE CENTERS

Data collection date:----------------

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</thead>
<tbody>
<tr>
<td>1.</td>
<td>Dr. Mehreen</td>
</tr>
<tr>
<td>2.</td>
<td>Dr. Yousaf</td>
</tr>
<tr>
<td>3.</td>
<td>Dr. Majid</td>
</tr>
<tr>
<td>4.</td>
<td>Ms. Naveeda</td>
</tr>
<tr>
<td>5.</td>
<td>Mr. Waqas</td>
</tr>
<tr>
<td>6.</td>
<td>Ms. Saima</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Variable no.</th>
<th>Name of the variable</th>
<th>Codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.</td>
<td>Age of the patient (in years) if available</td>
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</tr>
<tr>
<td>3.</td>
<td>Total admissions in Gyne ward (50 years and above) for the three representative months</td>
<td>Please write total numbers</td>
</tr>
<tr>
<td>4.</td>
<td>Diagnosis at time of admission on register for the patients age 50 years and above for the three representative months</td>
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</tr>
<tr>
<td>5.</td>
<td>Total number of Major surgeries performed for women 50 years and above for the three representative months</td>
<td>Please write total numbers</td>
</tr>
<tr>
<td>6.</td>
<td>Total number of Minor surgeries performed for women 50 years and above for the three representative months</td>
<td>Please write total numbers</td>
</tr>
</tbody>
</table>
HelpAge is a UK based International organization working in 60 countries with more than 180 partners around the world. HelpAge International has been working in Pakistan for close to two decades through partners and an established country office since 2010. HelpAge is committed to help older people claim their rights, challenge discrimination and overcome poverty so that they can lead dignified, secure, active and healthy lives.

House No. 9, Street 32, F-6/1 Islamabad
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E-mail: info@helpage.org.pk
Website: www.helpage.org

Health Services Academy was established in 1988 as an autonomous department under the Federal Ministry of Health and now under the Cabinet Division, Government of Pakistan, provided short courses and training for public health professionals. Since its humble beginnings as a training institute, the Academy has grown steadily and has established itself as the premier institute of public health in Pakistan, looking to provide more academic programmes in the near future, as well as providing an environment that focuses on excellence in academics, research, and policy-making.

Opposite National Institute of Health (NIH)
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Fax: 051-9255591
E-mail: academy@hsa.edu.pk