COMMUNITY BASED EPIDEMIOLOGICAL/STATISTICAL STUDIES OF MALE PATIENTS/DISEASES IN OUT-PATIENT-DEPARTMENT AT SHIFA-UL-MULK MEMORIAL HOSPITAL FOR EASTERN MEDICINE

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ABSTRACT

Brief Description: Shifa-Ul-Mulk Memorial Hospital for Eastern Medicine is the first and only Hospital in Pakistan, providing health care facilities through Unani/herbal System of Medicine. It is a 50-beded Hospital providing free health care. It has well equipped Wards, Laboratory, Operation Theater, Labour room, etc. The Hospital was founded in 2000 and since, it is the only Health Care Center of >28 villages near the city of education, Bait-Ul-Hikmah.

Purpose: Statistical data based on number of patients, diseases, age groups, etc has long been needed in order to promote and elevate the health care facilities to the patients of the rural areas around the Bait-Ul-Hikmah. The objective of our study is to determine the prevalence of male diseases specially those, not responded to therapies of modern medicine. Also, we have an eye on the diseases which are occurring more frequently, so that we are able to target the etiology and better management of these diseases.

Results: 35, 216 male patients were seen at the OPD. 6,919 in the Year 2000, 9,144 in 2001, 9,693 in 2002 & 9460 in 2003. Number of patient’s increases from 2000 to 2002 & decreases in 2003. Disease of GIT (34.47%) has the highest prevalence while Respiratory disease (22.89%) being the second. Age group of 18-45 years has got the largest numbers and most of the patients were married. Respiratory, skin & infectious diseases are more common in children.

Keywords: Male Outpatients- Disease frequency-Age distribution-Key facts.

YEAR 2000

Introduction

The study reports from January 2000 to December 2003. In the Year 2000, there is a total of 6919 male outpatients were seen at the OPD of Shifa-Ul-Mulk Memorial Hospital, at a rate of 577 patients/Month (Fig. A1). It has been obvious from the graph A1 that number of patients increases in the middle of the year (April-September), while there frequency decreases at the extremes of the calendar year (October-March).June is the Month that contains the highest number of patients i.e. 696, whereas the least number of patients were seen in December i.e. 436.
to their ages, simply 1-17 years, 18-49 years, and more than 50 years.

Prevalence of respiratory, skin and infectious diseases are more common in teenagers (1-17 Years). In young and late adult patients, frequency of diseases regarding GIT and urogenital system are more common, while in the third group (geriatric), CVS, CNS, generalized weaknesses, musculoskeletal and endocrinal diseases are mainly occurring diseases.

Mostly the patients are married 52.27%, which makes a total of 3616 Marries Patients. The rest of the patients are Unmarried and their total number is 3303.

**Key Facts**

After a follow through of the study of the Year 2000, it is quite clear that the Gastrointestinal Tract is the most common system to be affected and Respiration to be the second.

Third Place is occupied by Infectious Diseases. When we talk about the age groups with respect to diseases, Geriatrics (<50) (38%) has the highest prevalence, but they are very close to the Adults and post adults (18-
Mostly the patient came in the month of June (696) & highest number of patients came from April to July. The possible etiology of this will be discussed in the final conclusion.

**YEAR 2001**

**Introduction**

Year 2001, started in the same pattern, as 2000 i.e. mostly the patients are less at the beginning and at the end of the year. Total of 9144 patients were seen at the OPD of Shifa-
Ul-Mulk Memorial Hospital at a rate of 762 patients/Month. This figure is quite high as Month of November i.e. 982 patients (Fig. B1). June contains the second highest numbers and the least number of patients came in the Month of February.

**Disease Frequency**

The same pattern has been followed over here also. 3097 (33.87%) patient belongs to Gastroenterology, whereas 2085 (22.18%) related to Respiratory System (Fig. B2). It means that more than 56% of patients came due to the illnesses regarding either GIT or Respiration.

**Age Distribution**

Unlike from the year 2001, mostly the patients belongs to the age group of Adults and Post adults (18-49), they together makes 3379.
Patients at an average of 36.97%. Frequency of pediatric diseases also increases from 25.10% to 29.49% and it makes a 2697 pediatric patients. Age Group of more than 50 accounts for 3067 Patients with an average of 33.55% (Table-B1).

Diseases related to Respiration, Skin and infections are more common in the pediatrics (Fig. B3).

Endocrinal and musculoskeletal diseases, diseases of CNS and CVS and weaknesses are more common in old age (Fig. B4).
Urogenital which also includes the sexual weakness is more common amongst the age group of 18-49 years. Married Patients have an average of 53.41% and their total number is 4884 (Fig. B2).

**Key Facts**

In the year 2001, Gastro-intestinal System is the most frequently affected system of the people of the villages around the Bait-Ul-Hikmah. Respiratory System has second highest prevalence, while infectious diseases being the third.

Number of Pediatric Patients increases from 25.10% to 29.49% this year and makes a total of 1697 Patients. Old Patients (>50) are decreased, now they are 33.5% from 38%. The remaining are the adults and post adults (36.97%), which has the highest prevalence. Highest Number of Patient came in October (982) and mostly the patient came to visit OPD from May to October. Married are patients are more as compare to unmarried. This completes our study of the Year 2001.

**YEAR 2002**

**Introduction**

Year 2002 contains the highest number of
patients so far. The number of male patients reaches 9693 during this year at an average of 808 Patients/Month. From May to September, there is highest number of Patients (Fig. C1). Highest number of Patients is in the month of August i.e. 961. In February, 593 patients visited OPD which is the least number of the year. The graph is quite evenly balanced.
when compares from the last two years. Similar to the last Year, frequency of Patient is less at the beginning and at the end of the year.

**Disease Frequency**

Number of Gastro-intestinal Patients increases up to 3250, which again makes this system to be the highest frequency of patients viz. 33.53%. Respiratory System again follows GIT, 2168

A patient belongs to it. Infectious diseases increases quite tremendously this year, they reached almost 1200 at an average of 12.32%. Again diseases related to Endocrinology, ENT and CVS are much less this year.

**Age Distribution**

Most of the Patients lie between the age group of 18-49 Years (Adults and Post adults). Their total number is 3800 at an average of 39.20%, followed by the geriatrics (31.94%). Pediatric patients almost remain the same-28.88% (Table-C1). Respiratory, dermatological and Infectious diseases are the most common cause of the pediatric patients to visit the OPD this year (Fig. C2).

Generalized weaknesses, diseases of CVS, CNS, endocrinal and musculoskeletal diseases are more common in Old Patients (Fig. C4). Gastrointestinal and urogenital diseases are more common in Adults and Post adults (Fig.C3). Numbers of Married Patients are much more during this year. 54.58% Patients are married. Number of Unmarried Patients is 4403.

**Key Facts**

Year 2002 has almost the same statistics as previous two years. Diseases regarding Gastro-intestinal and Respiratory Systems and Infectious Diseases exist with the percentage of 33.53%, 22.36% and 12.32% respectively, accounts for almost 70% of the diseases. Number of Pediatric Patients reaching 2797, Geriatrics include 31.94%. In the figure below most of the space is occupied by Adults and Post adults, which have the highest frequency as far as the number of patients are concern (39.20%). Mostly patients came in the mid of the year. The most important thing is that this year has the highest number of male patients and most of them are belong to the age group of 18-49 Years.

**YEAR 2003**

**Introduction**

In the Year 2003, there is a total of 9460 Patients visited the OPD at Shifa-Ul-Mulk Memorial Hospital, at an average of 789 Patients/Month. The number of Patients decreases as compare to the last year and this
happens for the first time. Otherwise the number of Patients increasing gradually from the Year 2000 to the Year 2002. Mostly the Patients came in the first Semester of the year, Unlikely from the last three years. In May there is a total number of 1098 Patients (Fig. D1). This is the highest Number of Patient in any Month, in our whole study. In February, there are 511 Patients and thus it has the shortest height in the graph.

Mostly the Patients came in the first Semester of the year, Unlikely from the last three years. In May there is a total number of 1098 Patients (Fig. D1). This is the highest Number of Patient in any Month, in our whole study. In

### Table-D1

<table>
<thead>
<tr>
<th>Diseases</th>
<th>1-17 Years (Teenagers)</th>
<th>18-49 Years (Adults)</th>
<th>&gt; 50 Years (Geriatric)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patients</td>
<td>%</td>
<td>Patients</td>
<td>%</td>
<td>Patients</td>
</tr>
<tr>
<td>GIT</td>
<td>571</td>
<td>16.35%</td>
<td>1687</td>
<td>48.32%</td>
</tr>
<tr>
<td>RTI</td>
<td>988</td>
<td>46.5%</td>
<td>401</td>
<td>18.88%</td>
</tr>
<tr>
<td>Urogenital</td>
<td>21</td>
<td>4.9%</td>
<td>295</td>
<td>68.77%</td>
</tr>
<tr>
<td>Skin</td>
<td>267</td>
<td>49.71%</td>
<td>209</td>
<td>38.91%</td>
</tr>
<tr>
<td>Fever</td>
<td>491</td>
<td>44.8%</td>
<td>218</td>
<td>19.9%</td>
</tr>
<tr>
<td>Weaknesses</td>
<td>22</td>
<td>5.08%</td>
<td>110</td>
<td>25.40%</td>
</tr>
<tr>
<td>CVS</td>
<td>NIL</td>
<td>6.01%</td>
<td>73</td>
<td>26.94%</td>
</tr>
<tr>
<td>CNS</td>
<td>19</td>
<td>6.01%</td>
<td>86</td>
<td>27.13%</td>
</tr>
<tr>
<td>M/S</td>
<td>08</td>
<td>1.35%</td>
<td>192</td>
<td>32.54%</td>
</tr>
<tr>
<td>ENT/Eye</td>
<td>53</td>
<td>44.16%</td>
<td>28</td>
<td>23.34%</td>
</tr>
<tr>
<td>Endocrinology</td>
<td>NIL</td>
<td>1.35%</td>
<td>17</td>
<td>33.33%</td>
</tr>
<tr>
<td>Total</td>
<td>2440</td>
<td>25.8%</td>
<td>33160</td>
<td>35.05%</td>
</tr>
</tbody>
</table>

Fig. D2
study. In February, there are 511 Patients and thus it has the shortest height in the graph (Fig. D1).

**Age Distribution**

Unlike from the last Year, number of Old Patients (>50) or Geriatric is the highest i.e. 3704 at an average of 39.15% (Table D1). Pediatric Patients also decreases to 25.8%.

Adults and Post adults also decreases slightly. Still Respiratory, Infectious, and Skin diseases are more common amongst the age groups of 1-17 Years (Fig. D3).

In Geriatric, diseases of CVS, CNS, Endocrinal and Musculoskeletal diseases are more common (Fig. D4). In the age groups of 18-49, frequency of Urogenital and GIT diseases are more common (Fig. D5). Mostly the Patients are married. A total of 5731 patients are married (59.45%) and 40.55% patients are not married.

**Key Facts**

This Year (2003) is quite different as far as statistics are concerned. It does not follow the same pattern 100%. As was previous.

Although, GIT, Respiratory System and Infectious diseases have the highest frequency, GIT has the highest number of Patients than any year.

As it is quit clear number of Adult and Post adult as well as Pediatric patient decreased (35.5% and 25.8% respectively) and hence Old Patient increases during the year (39.11%). In August of this Year, highest number of patient came to the OPD at Shifa-Ul-Mulk. Now let's turn to the comparative
analysis of the four years as well as the final conclusion of the study.

**COMPARATIVE ANALYSIS OF OPD FROM 2000-2003**

**Introduction**

From 2000-2003, there is a total of 35,216 Male Patients. In the year 2000 there are 6919 patients and this figure increases to 9144 in 2001. In 2002 the figure again increases to 9693 and in 2003 the number of patients decreases to 9460. This shows that, patient’s increases from 2000 to 2002. There is more than 20% increase in the OPD of Shifa-Ul-Mulk from 2000 to 2001. Year 2002 has got the highest figure i.e. 9693, while 2000 has the lowest (6919).

The reasons, that why the OPD was dynamically increased from 2000 to 2001, is that there was two days off and the Hospital works in the working hours of the Hamdard University. But when the facility was extended to 24 hours a day increases during the year (39.91%). In August of this Year, highest number of patient came to the OPD at Shifa-Ul-Mulk.

**Age Distribution**

When we categorize the patients into three age groups (1-17 Years, 18-49 Years and > 50 Years), we came to know that in 2000, there are 1737 (25.10%) patients belongs to the first age group i.e. Pediatrics. 2564 (37.09%) Male patients were either Adults or Post adults;
whereas 37.8% (2618) patients are of age more than 50 (Fig. E1). In the Year 2000 and 2003, most of the patients belong to the age group of > 50 and in 2001 and 2002 adults and post adults have the highest prevalence of diseases. However, the pediatric group always has the least quantity of patients.

The highest number of patients belong to any age group is 3800 in the year 2002, and
that age group is of adults and post adults. Likewise, the lowest figure is of 1737 i.e. of Pediatric patients.

This shows that most of diseases were encountered in age groups of more than 17 years. Although diseases of pediatrics are less common, it does not mean that these diseases are occurring less frequently. The reason that why patients of age group > 50 are less than adults and post adults is that those patients who need surgery are not included.
Disease Distribution

Table E1 shows the total number of patients per year according to the disease pattern, which has been arranged in descending order. According to this table, diseases of GIT, Respiration and Infectious diseases are the commonest cause of the patients to visit the OPD. CVS, ENT/Eye and endocrinial diseases are less common. Here again it proves that diseases, which require surgeries, are less common.

From here on, we’ll discuss the diseases pattern individually.

Gastrointestinal Diseases

Pattern of diseases regarding GIT, which also includes the Liver and Billiary Tract have...
Mostly the diseases are Stomatitis, Gastritis, Peptic Ulcers, Constipation and Hemorrhoids. Also Hepatitis, CLD, Pancreatitis and Jaundice also occurring quite frequently. In Pediatric Patients, Intestinal Worms is one of the major contributions.

This system has the highest prevalence amongst all other diseases (Table-E1). Graph (Fig. E2) shows that Patients visiting the OPD mainly in the Middle of the Year due to the ailments of GIT.

**Respiratory Diseases**

In Pakistan, winter season starts from November-December and remains till January-February. During this season the diseases like Upper Respiratory Tract Infections, pneumonia (in Children), chronic obstructive pulmonary diseases (COPD) like Asthma and Bronchitis, occurs more frequently. This statement is proved by the graph below (Fig.E3). Patients are more in number from November to February. Mostly the age group involved is 1 to 17 Years. Respiratory System has the second highest prevalence and Pulmonary Tuberculosis has some serious contribution to it.

**Infectious Diseases**

It includes different infections in which there is high-grade fever. Mostly the infections are viral and they are very common among children. These diseases are less common in first trimester of the Year i.e. from January to March (Fig. E4). Measles is very common amongst the children.
Skin Diseases
Skin Diseases are also very common in Pediatric out Patients department. This includes Dermatitis, Eczema, Vitiligo, Psoriasis acne, Seborrhoea, and Skin Allergies etc. They occur quite frequently and regularly throughout the year (Fig. E5).

Urogenital Diseases
Urogenital Diseases includes Upper and Lower Urinary Tract Infections like Acute and Chronic Pyelonephritis, Uretritis, Cystitis, Uretheritis, and Prostatitis.

Musculoskeletal Diseases
Diseases like Arthritis, Lumbago, Sciatica, Gout, Spondilytis, and Osteomyelitis etc lie in the group of Musculoskeletal Diseases. It follows the fact that these are more common in patients of age > 50 Years. (Fig. E7)

Generalized Weaknesses
Although it is not a disease can give rise to many diseases. So it is very important to treat it as a major Problem. We find many patients that came under this heading every year (Fig. E8). Weaknesses are very common in old aged patients due to malnutrition and overload, which is further aggravated by unhygienic condition present all around their environment.

Central Nervous System
CNS diseases are very common in old aged patients and these include Paralysis, Migraine, Headache, Epilepsy, Meningitis, and TIA. We also include Psychiatric Diseases like Depression, Anxiety, Schizophrenia, Dementia, Mania and Personality Disorders. The Graph (Fig. E9) is smoothly regular. Migraine, Paralysis and Depression are very common occurring diseases of CNS.

Cerebrovascular System
Ischemic heart diseases as Angina and Myocardial Infarction and Atherosclerotic Heart Diseases are very common diseases globally. But here in our study, its contribution is much less, as most of the coronary artery diseases required surgery (CABG). Awareness regarding Heart diseases also seems to be a contributing factor in less number of CVS patients. The Graph (Fig. E10) shows how they occur at Shifa-Ul-Mulk Memorial Hospital from 2000-2003.

Ear, Nose and Throat/Eye Diseases
It also includes a large number of diseases like Tonsillitis, pharyngitis, Otitis Media, DNS, Rhinitis, Conjunctivitis, Cataract, Blephritis, Ectropion, etc. Their numbers are very less and these diseases occupy the second last position in our selected groups of diseases. Diseases like Chronic Tonsillitis and Eye diseases that needs surgery (Cataract) does not included in this section. These diseases follow no pattern in the graph (Fig. E11).

Endocrinial Diseases
Diabetes Mellitus is one of the alarming diseases in our country and is very common all over the world. But in the villages near Hamdard University, people have almost no awareness about these diseases. That’s why there number is less at the OPD of Shifa-Ul-Mulk and this group comes in the last of all. The other diseases that includes in this group are diseases of thyroid (Hypothyroidism, Myxedema, thyroiditis), pituitary and other endocrinial diseases. Below is the annual graph (Fig. E12).

Marital Status of the Patients
Figure-E14 shows that 55% of the patients visiting the out patient department (OPD) at Shifa-Ul-Mulk Memorial Hospital of Eastern Medicine are married. It also includes widowed patients. But, the high frequency of
married patients is mainly because of the young age marriages that are practicing in the villages. The frequency of diseases in female patients is more common due to this fact, but it is not a part of our study.

CONCLUSION

The study comprises a total of 35216 male patients (in our selected groups of diseases) visited the OPD at Shifa-Ul-Mulk Memorial Hospital from the Year 2000 to 2003. In 2002, there is highest number of patients i.e. 9693. In June 2003 there is highest number of patients i.e. 9693.

Most of the patients belong to GIT, Liver and Billiary Tract diseases (12262 enrolments). Respiration and Infectious diseases are also very common. Diseases of CVS, ENT and endocrinology are occurring less commonly. Age Groups of Adults and Post adults have the highest frequency of diseases (13060 enrollments), but geriatrics lie very close to them. Pediatric Patients are less common, but they have major contribution in Respiratory, skin and infectious diseases. Mostly the patients are married, 55% of the patients, visiting OPD are married, and their number reaches 19521 enrollments (Out of 35216).

REFERENCES


