Cost Review of Basic Surgeries at Fatima Hospital

Asim Jaffery, Johar Raza, Mohammad Ahmed, Amber Dastigir.

Abstract:
Fatima Teaching Hospital provides basic surgical and medical facilities for rural population of Karachi. The hospital, being a project of the Baqai Foundation, provides these facilities at reduce costs. This article summerises the costs of three basic procedures offered at Fatima Hospital.

The hospital performed a total of 99 hernia repairs, 34 cholecystectomies and 24 haemorrhoidectomies over a 12 month period. The total cost paid by the patients for each, uncomplicated procedure, was 3390/-, 4010/- and 1600/- respectively. The contributions made by the Baqai foundation amount to be Rs 1000/- per patient per day. The over all contributions made by the Baqai Foundation over 1 year period for the three procedures was 297000/-, 170000/- and 87000/- respectively.

Baqai Foundation is making significant contributions towards provision of basic medical and surgical facilities to the poor people of rural Karachi, at a much subsidized and affordable rates.

Key Words: Cost review, basic surgeries.

Introduction:
He, Who, saved one life, saved the whole man kind. This religious fact has brought a great responsibility to the medical profession. Since its formation in 1980s, the Baqai foundation is serving the community with great care and enthusiasm. Fatima Teaching Hospital is one of the projects of the Baqai Foundation and contributes towards providing medical services to the rural population of Karachi. The surgical department of the hospital, performs a wide variety of surgical procedures, however the most common operations done here include hernia repair, cholecystectomy and haemorrhoidectomy. This article provides a review of costs for each procedures, and contributions made by patients and Baqai Foundation.

Method:
The data was collected retrospectively over 12 month’s period. Number of cases of hernia repair, cholecystectomy and haemorrhoidectomy were calculated. The expenses paid by the patient and BF were then estimated to determine the overall cost of each procedure in Fatima Hospital.

Results:
Over 12 months period from January 2006 to January 2007, a total of 99 Hernia repairs, 34 cholecystectomies and 24 haemorrhoidectomies were performed. Over all expenses paid by the patient for each procedure were Rs 3100/-, Rs 1800/-, Rs 910/- respectively. This included the costs of antibodies, sutures, mesh, medications, anesthetic drugs and supplies (Table 1).

<table>
<thead>
<tr>
<th>OPERATIVE EXPENSES</th>
<th>HERNIA</th>
<th>CHOLE</th>
<th>HAEMRR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antibiotics</td>
<td>180/-</td>
<td>210/-</td>
<td>30/-</td>
</tr>
<tr>
<td>Sutures</td>
<td>940/-</td>
<td>720/-</td>
<td>100/-</td>
</tr>
<tr>
<td>Supplies</td>
<td>380/-</td>
<td>470/-</td>
<td>380/-</td>
</tr>
<tr>
<td>Prolene Mesh</td>
<td>1200/-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Anesthesia</td>
<td>400/-</td>
<td>400/-</td>
<td>400/-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>3100/-</td>
<td>1800/-</td>
<td>910/-</td>
</tr>
</tbody>
</table>

Table 1. Breakup of operative expenses paid by the patient.

The preoperative expenses also involved the investigations. The Baqai Foundation provides some base line investigations free of cost, while the rest are provided at a subsidized rate (Table 2).

<table>
<thead>
<tr>
<th>INVESTIGATION COSTS</th>
<th>FREE</th>
<th>SUSIDIZED</th>
<th>COST</th>
</tr>
</thead>
<tbody>
<tr>
<td>URINE D/R</td>
<td>CHEST XRAY</td>
<td>60/-</td>
<td></td>
</tr>
<tr>
<td>BLOOD SUGAR</td>
<td>ULTRA SOUND</td>
<td>100/-</td>
<td></td>
</tr>
<tr>
<td>COMPLETE BLOOD COUNT</td>
<td>HEPATITIS SCREENING</td>
<td>300/-</td>
<td></td>
</tr>
<tr>
<td>ESR</td>
<td>LIVER FUNCTION TESTS</td>
<td>130/-</td>
<td></td>
</tr>
<tr>
<td>ECG</td>
<td>HISTOPATHOLOGY</td>
<td>310/-</td>
<td></td>
</tr>
</tbody>
</table>

Table 2. investigation done free of cost and on subsidized rates.
The post operative costs were calculated for uncomplicated cases, spending 3, 5 and 3 days respectively for the hernia repair, cholecystectomy and haemorrhoidectomy respectively. These costs were Rs 290/-, Rs 2210/- and Rs 690/- respectively, which included the histopathology costs at subsidized rates. Thus the overall cost paid by the patient for each procedure is Rs 3390/-, Rs 4010/- and Rs 1600/- respectively.

The Baqai Foundation, contributes approximately Rs 1000/-, per person per day. This cost is divided into three major categories. First the professional fees, which includes the surgeons, anesthetists, OT technically para medical staff. Secondly the theater expenses, which includes the maintenance, electricity and instrument charges. Lastly the ward expenses, which includes the bed costs, free meals and charges of other supplies. This figure also includes the contributions made towards the costs of the free and subsidized investigations. The over all contributions of the Baqai Foundation for hernia repair, cholecystectomy and haemorrhoidectomy include Rs 3000/-, Rs 5000/- and Rs 3000/- respectively, for uncomplicated cases spending 3.5 and 3 days respectively. The overall costs of the three procedures is, Rs 6390/-, Rs 9010/- and Rs 4600/- respectively (Fig 1).

![Total Expenses of each Procedure](image)

**Fig 1** Total expense for hernia repair, cholecystectomy and haemorrhoidectomy and part paid by the patient and BF in Pak. rupee.

The expenses made by the Baqai Foundation, over the 12 month period, includes Rs 297,000/0 for 99 hernia repair, Rs 170,000/- for 34 cholecystomies and Rs 87,000/- for 24 haemorrhoidectomies (Fig 2).

![Expenses Paid by BF in Jan 06 - Jan 07](image)

**Fig 2** Expenses paid by BF for hernia repair, cholecystomies and haemorrhoidectomy from January 20006 to January 2007.

**Discussion**

Provision of medical facilities, has always been associated with high expenses and the cost are mainly sustained by the government sector. Efforts have been made to provide health care facilities by the private sector and cost of such expenses reported even in third world countries 1,2.

Although no such reports have been encountered in local literature, Porrero JI et al compared the costs of open hernia repair, in Spain, amounting to 235 euros in comparison with our study in which costs were only 6390/= rupees 3. Other studies have also been reported comparing the costs of open repair versus laparoscopic 4,5.

During literature search we did not come across any significant cost evaluation of open cholecystectomy and haemorrhoidectomy, however comparison and cost effectiveness of open versus laparoscopic cholecystectomy have been reported 6.

**Conclusion:**

The Baqai Foundation is providing basic medical and surgical facilities for the rural population of Karachi at much subsidized rates. The operative costs have been made affordable by the poor masses.

**References:**


3. Porrero JL et al Repair of primary inguinal hernia:


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