Original Research Article

Assessment of the effectiveness of training and orientation of interns by introduction of specialized female surgical clinic

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ABSTRACT

Background: There is requirement of specialized female surgical clinics nowadays, which should be addressed routinely in the surgical department. For management of surgical problems in female patients, multidisciplinary approach mainly general surgery, obstetrics and gynaecology, general medicine, paediatrics, dermatology and psychiatry is required. The main aim and objective of this study is to assess the effectiveness of training and orientation of interns by introduction of specialized female surgical clinic.

Methods: Prospective educational interventional study was conducted. 60 sensitized interns were introduced and oriented in the specialized female surgical clinic. A total of 952 patients visiting the clinic were studied. Statistical analysis was done.

Results: Feedback of interns with respect to female patients were taken and recorded. There was a significant improvement in the knowledge and skill of the participating interns. Most of the interns were willing to continue their duties to such a specialized clinic in future.

Conclusions: It can be concluded that the interns sensitized and exposed to this innovative method of training have shown a positive approach to this new method of learning. Such fully functional specialized female surgical clinic is required in hospital, in which participation of interns is useful.

Keywords: Specialized, Clinics, Information, Knowledge, Interns, Female patients

INTRODUCTION

There is a need of specialized female surgical clinics as there is no such provision in routine surgical departments for management of surgical problems which are related to female patients we require multidisciplinary approach mainly general surgery, obstetrics and gynaecology, general medicine, paediatrics, dermatology and psychiatry. Also in the current curriculum of undergraduate and postgraduate teaching surgical disorders in female are not addressed separately.¹⁴ No provision of special care to females visiting surgical OPD (outpatient department) have been made, where the female patients can be seen and treated separately. This study can sensitize the Indian Medical Graduate (IMG) towards the need to study surgical diseases in females as a subspecialty, to make them aware of the needs and the ethical issues for female patients to be treated in a comfortable environment and further career opportunities for them as a postgraduate student to study female surgical diseases as a subspecialty and a super speciality in times to come.³⁶ This study was conducted to assess the effectiveness of training and orientation of interns by introduction of specialized female surgical clinic, so that
Interns got oriented to such clinics and impart their role in management of surgical problems related to female patients by implementation of training in future.

**Aims and objectives**

To assess the effectiveness of training and orientation of interns by introduction of specialized female surgical clinic and to sensitize, orient and train intern in an innovative way for treating female surgical patients.

**METHODS**

Prospective educational interventional study was conducted in Surgery department of Sanjay Gandhi hospital (Shyam Shah Medical College, Rewa, Madhya Pradesh). A total of 952 female patients visiting the clinic were studied. All the female patients visiting female surgical clinic for duration of one month participated in this study. 60 sensitized interns were introduced and oriented in the specialized female surgical clinic.

**Inclusion criteria**

All female patients of any age group visiting surgical OPD were included in study.

**Exclusion criteria**

Patients excluded from study were all female patients with co morbid conditions and required referral to any other department and those females who were not willing to participate in study.

**Study period**

Study period was one month (August 2018 to September 2018).

**Study population**

Along with the General Surgical OPD, a separate specialised female surgical clinic was established. Only female patients of all age groups registered in this particular clinic were among the study Population. The clinics were conducted by the faculty members, senior residents, postgraduate students of the Department of Surgery and interns posted in the department. 60 interns were introduced and oriented in the specialised female surgical clinic.

**Study procedure**

A separate waiting room, examination room and procedure room and separate paramedical staff (females) for the female surgical patients were facilitated. Written informed consent of all female patients was taken at the time of registration. All details of the patients were recorded in a predesigned proformas. A feedback was taken from the interns (60). A pre-test and post-test evaluation of all the interns was done on the sensitization and orientation workshop conducted. The prospective educational interventional study period was for one month during which the sensitized interns (60) attended surgical outpatient department. Along with the general surgical OPD, a separate specialised female surgical clinic was conducted. The interns were posted in the specialised female surgical clinic which ran as a separate clinic on all working days. Only female patients of all age groups were registered in the study. Each intern had 4 days of experience of working in the specialized female surgical clinic.

**Statistical analysis**

Proper statistical analysis was done by using paired t test. Data were entered in Microsoft excel and analysed by using SPSS software. Mean and standard deviation were calculated.

**RESULTS**

Significant association was found between skills of interns before and after the teaching innovation with respect approach to female surgical disease (FSD), symptoms and signs of FSD, investigations done in cases of FSD, approach to diagnosis in FSD, treatment and counseling of patients of FSD and taking feedback of patients attending the specialized female surgical clinic.

Mean scores of interns on assessment of internship in pre-test were 9.94±1.66 and in post-test they had mean scores of 18.33±1.328.

Internship assessment before and after teaching innovation had significant association which means that this teaching innovation was useful in making students understanding the importance, the knowledge and the attaining the skill to manage female patients having surgical problems.

<table>
<thead>
<tr>
<th>Skill on topic</th>
<th>Mean</th>
<th>Std. deviation</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approach to FSD as assessed by intern before the teaching innovation</td>
<td>2.28</td>
<td>0.895</td>
<td>0.00</td>
</tr>
<tr>
<td>Approach to FSD as assessed by intern after the teaching innovation</td>
<td>4.22</td>
<td>0.808</td>
<td></td>
</tr>
<tr>
<td>Symptoms and signs of FSD as assessed by intern before the teaching innovation</td>
<td>2.44</td>
<td>0.856</td>
<td>0.00</td>
</tr>
<tr>
<td>Symptoms and signs of FSD as assessed by intern after the teaching innovation</td>
<td>4.33</td>
<td>0.686</td>
<td></td>
</tr>
</tbody>
</table>

Table 1: Association of skills as assessed by interns themselves before and after teaching innovation (n=60).

Continued.
<table>
<thead>
<tr>
<th>Skill on topic</th>
<th>Mean</th>
<th>Std. deviation</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investigations done in FSD as assessed by intern before the teaching innovation</td>
<td>2.11</td>
<td>0.676</td>
<td>0.00</td>
</tr>
<tr>
<td>Investigations done in FSD as assessed by intern after the teaching innovation</td>
<td>4.33</td>
<td>0.594</td>
<td></td>
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<tr>
<td>Approach to diagnosis of FSD as assessed by intern before the teaching innovation</td>
<td>1.94</td>
<td>0.802</td>
<td>0.00</td>
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<tr>
<td>Approach to diagnosis of FSD as assessed by intern after the teaching innovation</td>
<td>4.33</td>
<td>0.767</td>
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<tr>
<td>Treatment and counselling of patients of FSD as assessed by intern before the teaching innovation</td>
<td>2.06</td>
<td>0.639</td>
<td>0.00</td>
</tr>
<tr>
<td>Treatment and counselling of patients of FSD as assessed by intern after the teaching innovation</td>
<td>4.44</td>
<td>0.616</td>
<td></td>
</tr>
<tr>
<td>Taking feedback of patients of FSD as assessed by intern before the teaching innovation</td>
<td>2.11</td>
<td>0.9</td>
<td>0.00</td>
</tr>
<tr>
<td>Taking feedback of patients of FSD as assessed by intern after the teaching innovation</td>
<td>4.56</td>
<td>0.616</td>
<td></td>
</tr>
</tbody>
</table>

Table 2: Internship assessment of participating interns in specialized female surgical clinic.

<table>
<thead>
<tr>
<th>Paired samples statistics</th>
<th>Mean</th>
<th>Std. deviation</th>
<th>Std. error mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-test</td>
<td>9.94</td>
<td>1.626</td>
<td>0.383</td>
</tr>
<tr>
<td>Post-test</td>
<td>18.33</td>
<td>1.328</td>
<td>0.313</td>
</tr>
</tbody>
</table>

Figure 1: Mean internship assessment scores.
Difference: 8.390; Standard error: 0.495; 95% CI: 7.3844 to 9.3956; t-statistic: 16.955; Significance level: p<0.0001.

DISCUSSION

In our study significant association was found between skills gained by interns as perceived by themselves before and after the teaching innovation with respect approach to FSD, symptoms and signs of FSD, investigations done in cases of FSD, approach to diagnosis of patients of FSD, treatment and counselling of patients of FSD and taking feedback of patients visiting the specialised female surgical clinic. But we could not find any such studies regarding intern teaching innovation, so comparison could not be made but there is significant Improvement in skills and knowledge of interns regarding female surgical problems.

There was an improvement in affective and cognitive domain of interns during communication skills with patients. We have the charge of teaching medical students surgical knowledge, decision making, and technical skills while simultaneously demonstrating professionalism and ethical principles. As clearly articulated by our results, the expectations are that the medical student can perform a surgical consultation, demonstrate preoperative counselling, understand basic operative procedures, and finally perform postoperative care with an awareness of potential surgical complications. These objectives can all be achieved by employing traditional teaching methods as well as newer and creative modalities such as patient oriented specialised clinics. In addition to our role as educator, we must demonstrate the need and desire for life-long learning as we are forever students.

Limitations

As the duration of project was short, it is not possible to draw long term conclusions; also it was not possible to follow up the patients for long term so to overcome this limitation further long term projects should be conducted and there was constraint of literature regarding teaching of interns in relation to female surgical clinics so comparisons could not be made.

CONCLUSION

Although implementation of learning on the job model to the interns was useful in uplifting the knowledge, information and skills of interns regarding female surgical OPD. Thus this formed bridge between education and service and played important role in training and orientation of interns. A stimulating internship experiences an important prelude to further residency training.
Further, introduction of female surgical OPD was very useful to the most of the patients, as female patients preferred their treatment in such specialized clinics. Also their revisiting rate was also more due to satisfactory services provided in such clinics. Thus, a quality care and quality treatment was provided to all the patients, especially female patients.

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Ethical approval: Not required

REFERENCES
