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SPECIAL ARTICLE

Optimising Bedside Teaching in Obstetrics and Gynaecology

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ABSTRACT

Practicing Obstetrics and Gynaecology requires physician's competence in many clinical and communication skills. Thus, bedside teaching should be considered a strong component of training. A look at what are the advantages and challenges of bedside teaching could help us to optimise the use of it in current Obstetrics and Gynaecology education.

Keyword: bedside teaching, obstetrics and gynaecology education

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Introduction

Bedside teaching is a small group teaching which involves patients as part of the teaching-learning activity. Originating in Italy around the 18th century, this patient-base teaching style was first introduced to medical schools[1]. However, it was not very popular at that time as most of medical education was still rely on reading and lecturing. Sir William Osler (1847-1919) was a great medical teacher who pioneered the practice of bedside teaching for modern medicine. During his post as foundation physician-in chief and chairman of medicine at Johns Hopkins University, he introduced a clerkship system that gave students a role in clinical practice. In his view, teaching medicine should be focused at the bedside, not in the lecture theatre[2].

The popularity of bedside teaching seems to peak during 1960s. In 1964, Reichsman F, et al conducted an observational study on medical undergraduates' clinical teaching at 9 US medical schools. The result shows that 75% of all clinical teaching involve a presence of patient [3]. Unfortunately, this popularity did not last very long. The present-day medical schools tend to move away from patient's bedside toward the hospital corridors, and eventually a conference room. Where patients are presented as just a case with specific disease and more effort was to put toward the investigation results rather than history taking and physical findings. A study in 1997 indicated that the incidence of bedside teaching in medical school has dropped down to only 16%[4]. There are concerns that this decline may results in poor clinical skill of new generation medical trainees[5, 6].

In Obstetrics and Gynaecology (OB-GYN), bedside teaching plays a big part as an invaluable method of teaching at both undergraduate and postgraduate level. It is promising, especially in the context of interviewing and examining female/pregnant patients, which require delicate manner along with empathetic and caring attitude. Despite this value, the bedside teaching in OB-GYN is still outnumbered by

conference room case presentation. And for those very few that are still being conduct, some of them are still not done effectively. A closer look at what we could actually benefit from the bedside teaching, what are the barriers and how to overcome them would be good steps toward understanding and promoting better practice of bedside teaching in OB-GYN.

Advantages of bedside teaching

The most important aspect of teaching with real patients is that learners can maximize their experiential learning with the most relevant resources of medicine: patients. During the patient encounter, students are given opportunity to observe or even perform their own medical practice. Bedside teaching also provides great opportunities for students to use all their senses to learn: visual, auditory, olfactory and tactile senses. For a visual sense, seeing some clinical pictures in a textbook might be comparable to seeing a real one. But for other senses, they cannot be made explicit in any textbook. Thus, it is almost impossible to understand just by reading alone.

Below are a summary of valuable learning opportunities in OB-GYN that could be achieved from a bedside teaching.

Using auditory sense

- Listen to a fetal cardiac activity
- Listen to cardiac murmur in pregnant woman
- Listen to abnormal bowel sound on gynaecologic patients with peritonitis

Using tactile sense

- Palpation of abnormal mass in the abdomen or pelvis e.g. ovarian tumour, uterine fibroids.
- Palpation of foetus in the pregnant abdomen (Leopold's manoeuvre).
- Digital examination of cervical dilatation and effacement during labour.
- Bimanual pelvic examination to evaluate abnormality in the pelvis.
- Feeling the tensed up uterine contraction of pregnant women in labour.

Using olfactory sense

- Recognize the smell of amniotic fluid in premature rupture of membranes.
- Recognize the smell of foul smell vaginal discharge in some disease such as pelvic inflammatory disease, infected chorioamnionitis, and cervical carcinoma with tumour necrosis.

Communication skills

Teachers can demonstrate how to take relevant history while being polite and empathetic. This is very important, especially with gynaecologic patients, whom some very private questions regarding sexual life must be asked.

Students should also be able to practice a patient counselling session on a subject of patient's concern. This could be very challenging for both the students and the teacher. Some teachers may prefer to let the student have the show as they stand by and watch. However, it might be a better idea to get the student to practice or recite with the teacher what they are going to talk beforehand, instead of just letting them do it straight away.

Professionalism

There are many proposed definition of professionalism but the consensus has not been reached because professionalism is multi-faceted and dependent on many contextual and cultural factors[7]. The Medical Council of Thailand has listed the following characteristic as standard professional habits[8].

- Honour and maintain professional set of value.
- Patient centred.
- Social protection and accountability.

To date, there is still no consensus on what is the best method to cultivate professionalism in medical schools[9]. But inarguably, A bedside round can provide an extraordinary opportunity to deal with many issues of professionalism[10]. Whether it is for teachers to demonstrate role model to student, or to assess students' professionalism within clinical setting and provide feedback to them.

Bedside manners

Whether it is entering a room with a knock on the door, a respect to patient's privacy or dealing with

lightings/ television in a patient's room, these trivial etiquettes of bedside manner are frequently observed during bedside teaching round with the teacher as a role model. Students take what they see as an acceptable behaviour and use that to develop their future professional conduct. Most of the time this learning happens indirectly, but mentioning what has been done to demonstrate a good bedside manner in each session of teaching rounds would leave an even more clear impression to the students. Frank H Boehm suggests that a bedside teaching exclusively focused on bedside manners should be incorporated into the medical education. And it should be introduced early in the clinical years as it help students develop proper conduct at bedside for their upcoming clinical contact with patients[11].

The challenges of bedside teaching

As mentioned before, the practice of bedside teaching in medical schools has been declining. Many studies have tried to look into this problem and found out that there are many factors contribute to this decline.

The teacher

- Time constraint: Consultants are required to complete many tasks other than teaching. With more clinical, research and administrative duties to be completed, less time is spent with a proper bedside teaching[12].
- Lack of skills and confidence: Some consultants, especially those with less experience in teaching, are not sure how to lead a bedside teaching round. This may results from the fact that the young generation consultants themselves are not familiar with bedside teaching during their own training. And regrettably, looking into other resources such as textbooks about medical education, there are only little information available about how to conduct a bedside teaching[13].

The students

- Large number of students congested in a group: It is suggested that there should be no more than 4 students in a group, especially when teaching on procedural skills at bedside[14]. However, with larger number of medical student each year, it cannot be avoided to have a larger number of students in a group. At some institution, there are as many as 20 students in each group[15]. This leads to students feeling distracted and bored and patients feel intimidated by too many students in their room.

  I personally allow up to 8 students in a teaching round group. A number that they are still able to stand comfortably around patient's bed and the teacher can get a proper eye contact with all of them.
- Lack of interest and students' absence: Some students feel that clinical skills can be acquired elsewhere, either from simulators, or during their postgraduate training. This belief discourages them to attend a bedside teaching round. Fear of humiliation because they cannot answer questions in front of their peers is another factor contribute to their absence at teaching round[15].

The patients

- Less number of cases: with more medical service available outside hospital. Fewer patients are coming to teaching hospital. And in some institution, most of the admitted patients have a complex disease and are a highly complicated that they are not suitable to be involved in teaching at undergraduates level.
- Shortened hospital stay: current advance in medicine results in patients requiring fewer days in the hospital. With better treatment options and a more rapid recovery, chances for students to see a patient who is still in active illness or still presenting significant clinical signs reduce.

Current practice of bedside teachings in OB- GYN

The factor that sets bedside teaching in OB-GYN apart from other specialties is that OB-GYN patients seems to be more reluctant to give consent to participate in clinical teaching activities. This is reflected in the

study by Y Marwan in 2012, which 995 patients were asked to complete a questionnaire regarding their acceptance of medical student during their hospital visit. The result shows that OB-GYN patients have highest refusal rate to students[16]. This high refusal rate might be from many factors. One of them is the fact that gynaecologic examination is perceived as a very private practice and patients require full confidentiality in the doctor who is examining them.

In the gynaecologic outpatient clinic at Srinakharinwirot University, where I practice as a consultant, 2-3 medical students are assigned to one patient. In my perspective, it is very simple to gain consent for medical students to interview the patient. But when it comes to asking permission for students to perform physical examination, it is more challenging. This assumption is proved true in the previously mention study of Y Marwan. The refusal rate in OB-GYN patients are only 18% when students are taking history, but raise to 43% when it involves physical examination.

Furthermore, special consideration must be taken into account when dealing with pregnancy, a state of health that makes a hospital visit an exciting and joyful experience rather than an illness requiring medical attention. Pregnant women usually accept no risk at all and somehow "medical student" sounds like a risk to the mother. Some pregnant women even request to see "the best doctor". The key strategy to help gain pregnant women's consent is to introduce medical students as a part of the team caring for them. If the consultant gives the medical student credit, the patient will pay more respect to the medical student.

Ensuring patients that limits are set for medical student's capability of clinical practice is another way to make the patient feel it is more acceptable to them. Medical student's performance is also another crucial factor. Students that appear to be confident in what they are doing gain more trust from a patient. So, it is advisable that student's should be well prepared before performing in presence of a patient.

Strategies to overcome the challenges and enhances bedside teaching

Strategies to improve and promote a bedside teaching round have been widely discussed. Below is a summary of valuable suggestions.

Provide protected time to teaching

A protected time to teaching alone without any concern for other duties could be a great strategy to tackle the most rated hindrance to bedside teaching – time constraint[12]. With main focus given to teaching task, it is assumed that both quantity and quality of teaching should be improved.

At Emory University, an "Academic attending teaching shift" is put into use for the Emergency Medicine training program. Each faculty member is scheduled to this shift once or twice a year, during the time; he only provides lectures and bedside teachings to residents and medical students without any concern for clinical duties. Even though this restructured teaching program has not been formally evaluated for its effectiveness, the program appears to be progressing well and is highly rated among the students[17].

This model could be adapted into practice by assigning one consultant for a specific "bedside teaching" shift, provided that the institution has enough number of faculty members to even out the burden.

Good patient preparation

Without planning, an attempt to find an OB-GYN patient for a teaching round is often ended up with choices of post-operative patients in the ward, because patients are now admitted just one day before, or on the day of their scheduled operation. Unfortunately, these post-operative patients are not suitable candidates for many reasons. First, there are no significant pathological signs to be examined because the operation has already removed them. Second, the final diagnosis is already made explicit by the operative notes and might cause bias during differential diagnosis discussion. Third, the patients tend not to co-operate to give interview or physical examination because of their pain or residual effects of anaesthesia.

A good plan in advance could eliminate this problem. The consultant can review the monthly operative schedule, choose an appropriate patient, and obtain his/her consent for a bedside teaching in advance

during the pre-admission appointment. Medical students are then appointed to perform a teaching round on the day the patient is admitted for the operation.

For patients in the ambulatory clinics, obtaining consent for teaching might be easier if enough information is given to patient before they make their decision. A hand-out regarding standard procedure of clinical teaching involving medical students provided in the waiting area for patients to read before entering the doctor's room could be beneficial, as it can help patients feel more confident advocating in the clinical teaching activities.

Good teacher preparation

Ramani et al [5], proposed "the 12 tips to improve bedside teaching" (Panel 1), a detailed description of teaching strategies that could facilitate a better bedside teaching. These tips are mainly focused on the teacher's self-improvement and could be introduced as a guideline for a new faculty member who just starts leading a bedside teaching. A comprehensive faculty development program to familiarize faculty members with various small group teaching techniques could also be another support to help the teacher feel more confident at the bedside.

Panel 1: The 12 tips to improve bedside teaching

Tip 1	Preparation is a key element to conducting effective rounds and increasing teacher comfort at the bedside.
Tip 2	Draw a road map of what you plan to achieve at the bedside for each encounter.
Tip 3	Orient the learners to your plans for the session and negotiate goals and objectives for the session. Tell the learners what is to be taught
Tip 4	Introduce yourself and the team to the patient; emphasize the teaching nature of the encounter.
Tip 5	Role-model a physician-patient interaction.
Tip 6	Stepping out of the limelight and keen observation is a necessary part of learner-centred bedside teaching.
Tip 7	Challenge the learners' minds without humiliating, augmented by gentle correction when necessary. Do the teaching.
Tip 8	Tell the learners what they have been taught.
Tip 9	Leave time for questions, clarifications, assigning further readings, etc.
Tip 10	Find out what went well and what did not
Tip 11	Think about the bedside encounter; evaluate what went well and what went badly and what you would do the next time.
Tip 12	Start your preparation for the next encounter with insights from your reflection phase.

Conclusion

Even though a bedside teaching is time-consuming and requires complex teaching strategies to be implemented, it is still a valuable method of clinical teaching that cannot be replaced by other mode of teaching. A decline in bedside teaching time of current clinical education leads to concern that it might effects overall clinical skills of medical trainees. Despite this, every effort should be put towards promoting this traditional approach of medical training especially in Obstetrics and Gynaecology which is the area that require wide range of procedural and communication skills. Although there are potential obstacles to this encouragement, a well-planned strategy at one's own institution along with promoting motivations among faculty members could be a promising solution.

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