

# The Discussion on Clinical Practice Program in Pediatric Outpatient

Yanchun Li, Huanji Cheng, and Liming Pan

**Abstract**—The clinical practice in pediatric outpatient is very important to medicos. The students learn how to diagnose and treat with commonly encountered disease and frequently encountered diseases, learn how to diagnose the stubborn disease, learn how to treat with emergent and critical patients and learn how to communicate with parents of sick children. However, the present practice program has its' defect to a certain extent. The clinical practice in pediatric outpatient is too short or even canceled. The time to practice is often fixed at the end of each semester which leads to that the medicos only could see the diseases existed in that season. The practice content isn't planned as a whole. So we could make a reformation attempt to practice in pediatric outpatient as below: 1. increase the practice time in pediatric outpatient; 2. practice disperses in four seasons; 3. the students rotate around all special clinics and emergency room; 4. the teaching method of practical operation; 5. the application of tutorial system for interns. Pediatric outpatient is the window of clinical work. The amount of patients is large, the crowd of patients is complex and varied and the kinds of disease have great variety. We should strengthen practice in pediatric outpatient so that medicos could master the necessary skills and lay a strong foundation for their further clinical work in the future.

**Index Terms**—Pediatrics, medico, clinical practice.

## I. INTRODUCTION

The clinical practice in pediatric outpatient is very important to a medico. Pediatric outpatient is the first window to contact patients at which medicos will meet the great mass of patients and encounter many kinds of disease including commonly encountered disease and frequently encountered disease, while just these diseases are the necessary content that a pediatric clinician must grasp. In addition, medicos will encounter a lot of emergent and severe patients in pediatric outpatient so that medicos could learn the basic skills to treat with emergent and severe patients. So the clinical practice in pediatric outpatient is a significant content in clinical practice. The clinical work in pediatric outpatient has its' own characteristic, however, nowadays the clinical practice program has its' defect to a certain extent. I think the practice program in pediatric outpatient should be designed and executed according to its' own characteristic

## II. THE SIGNIFICANCE OF CLINICAL PRACTICE IN PEDIATRIC OUTPATIENT

### A. Most Patients Suffering from Commonly Encountered Disease and Frequently Encountered Disease

Pediatric outpatient is the first window to welcome patients. Most patients receive examination, diagnosis and treatment here and few patients who are emergent or severe are hospitalized. So most kinds of disease in outpatient are commonly encountered disease and frequently encountered disease. To be a pediatric physician, the all-important task is to master the diagnosis and treatment of commonly encountered disease and frequently encountered disease which won't exist in inpatient. That shows the significance of clinical practice in pediatric outpatient.

### B. Some Kinds of Disease Could Only Be Seen in Outpatient

Some kinds of disease such as minimal brain dysfunction (MBD), tics-coprolalia syndrome, benign croupous angina could only be seen in outpatient because the patients don't need be hospitalized and almost be diagnosed and treated in outpatient.

### C. Learn How to Diagnose the Stubborn Disease

Patients with stubborn disease will get to outpatient first, and then be hospitalized. At present, pediatric specialties are more and more including respiratory, urology, gastroenterology, hematopathy, neurology, neonates, cardiovascular, immunology and so on. A pediatric physician should be able to make a primary judgment to stubborn disease, put forward some necessary examinations to form a primary diagnosis and hospitalize him or her to the relevant special department.

### D. Learn How to Treat with Emergent and Critical Patients

The most important task of physicians in pediatric emergency room is to treat with patients who are emergency and seriously ill, such as patients with poisoning, convulsion, premature, shock, cerebral hernia, encephalitis, ketoacidosis, dehydration, indiqitation, heart failure, sudden stop of breath and heartbeat and so on. These patients need to be treated immediately to stabilize their vital signs so that they could be transferred to inpatient alive. The ability to treat with emergent and critical patients is the basic skill which a pediatric physician must grasp. The medicos will encounter many emergent and critical patients from various specialties and learn how to treat with them.

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### *E. Learn How to Communicate with Parents of Sick Children*

There are about 1000~2000 attendances in outpatient everyday and each physician may receive about 50~90 children everyday. Contacting with so many parents of sick children can improve medicos' techniques and skills of communicating with parents. As we know, the communication between the medical personnel and patients is an important aspect of medical treatment activity [1]. A lot of medical dissensions were produced just because of insufficient communication with patients or ill-mannered doctors. Frequent and long-playing contact with parents of sick children will let medicos know the thought of parents gradually so that they could communicate with parents with individuation and consequently avoid medical dissensions.

In brief, for those who practice in pediatric department of general hospital, the clinical practice in pediatric outpatient is helpful to teaching work. It not only promotes the students' motivations to study, but also fosters their abilities including clinical thought, practical operation and communication [2].

### III. THE PRESENT PROBLEMS TO THE CLINICAL PRACTICE IN PEDIATRIC OUTPATIENT

#### *A. The Clinical Practice in Pediatric Outpatient is Too Short*

Most of medical university doesn't set up the clinical practice in pediatric outpatient, and even they does, the clinical practice in outpatient is rather short. While the significance of clinical practice in pediatric outpatient is indubitable, decreasing the arrangement of it, even canceling it is not good for medicos to master the commonly encountered disease, frequently encountered disease and the skill to treat with emergent and critical patients.

#### *B. The Time to Practice is Fixed*

The clinical practice is almost arranged at the end of each semester which leads to that the medicos only could see the diseases existed in that season. However, the kinds of pediatric disease have strong seasonal characteristic. For example, respiratory diseases such as bronchiolitis and pneumonia have high incidence in winter; benign croupous angina and hand-foot-mouth disease (HFMD) do in summer; while gastrointestinal disorders such as diarrhea and vomiting are more common in autumn. So if the medicos only come to pediatric outpatient to practice at fixed time every year, they can only see a few kinds of diseases. That is rather unilateral.

#### *C. The Practice Content Isn't Planed as A Whole*

There are two kinds of consulting room: emergency room and general room. Practice in emergency room aims at training medicos to grasp the principle and procedure for treating with emergent and critical patients, while practice in general room aims at knowing the diagnosis and treatment of commonly encountered disease and frequently encountered disease. At the moment, the practice in pediatric outpatient hasn't been planed as a whole. The students often were divided to several groups and sent to deferent consulting

rooms. They never rotate around all rooms. It brings that the students couldn't experience every kind of disease and couldn't form the comprehensive perception to so many kinds of diseases.

### IV. AS STATED PREVIOUSLY, WE MAY TRY TO MAKE REFORMATION TO PRACTICE IN PEDIATRIC OUTPATIENT AS BELOW

#### *A. Increase the Practice Time in Pediatric Outpatient*

We should increase the practice time in pediatric outpatient because the clinical practice in pediatric outpatient is of importance to medicos. In some medical university, they even didn't set up the clinical practice in pediatric outpatient which is not good for medicos to master basic clinical knowledge and skills. We think 2~4 weeks will be reasonable for practice in pediatric outpatient.

#### *B. Practice Disperses in Four Seasons*

Because the kinds of disease in pediatric outpatient have strong seasonal characteristic, the clinical practice in pediatric outpatient should be dispersed in four seasons so that students could experience corresponding commonly and frequently encountered diseases in relative seasons. Several days in mid-semester and the end of term in which representative diseases have high incidence can be selected.

#### *C. The Practice Content Is Planed as A Whole*

Pediatric specializations are more and more refining, and so is pediatric outpatient. Besides emergency room, there are many special clinics in pediatric outpatient including asthma, nephropathy, epileptic, hematopathy, neonate, growing development special clinic and so on. The patients from each special clinic have their own characteristics. So the students should rotate around all special clinics and emergency room so that every student could experience all kinds of disease in every special clinic. That will be beneficial to form general knowledge.

#### *D. The Teaching Method of Practical Operation*

Some teachers recommend the application of teaching method of practical operation in clinical pediatric practice [3]. During the course of probation, the students are allowed to attend some clinical operations and trains so that they could connect theory with practice, improve their abilities of practical operation and clinical comprehensive quality. The students contact with patients directly including asking the medical history and physical examination that will undoubtedly improve the medicos' basic skills and play a positive role in clinical practice. But we must realize that the amount of patients in pediatric outpatient is large. While medicos asking history and making physical examination must be unskillful and time consuming, that easily lead to patients' rashness when waiting for a long time. So this method should be applied moderately in pediatric outpatient. In addition, there are some clinical operations such as lumbar paracentesis, bone marrow paracentesis and so on which could be observed and learned by medicos. During the seasons in which encephalitis is prevalent, the number of encephalitis cases who need lumbar paracentesis could be

twenty or more every day. If medicos practice in pediatric outpatient in an encephalitis season, they will get a lot of chances to watch and learn clinical operations. But the method of practical operation couldn't be applied in these clinical operations, which mean that medicos could only watch them instead of do. "If you read The Three Hundred Tang Poems fluently, you can at least recite poems if not write one." It is most true, that was anciently spoken. Medicos watch a lot of clinical practical operations, which will lay a good groundwork for their practical operations in the future.

#### *E. The Tutorial System for Interns*

The tutorial system for interns has been put into practice on a trial basis and approved by some hospitals [4]. In pediatric outpatient, because the fixed physicians are limited in number, the physicians in each special clinic changed daily, especially physicians in emergency room work in shifts round the clock which result in their time more unfixed, it is difficult to enforce one-to-one teaching. We could try to enforce more-to-more teaching first, for example, the physicians who are in one special clinic teach one group of interns, which could achieve a good practice effect, too.

#### V. EPILOGUE

Pediatric outpatient is the window of clinical work. The amount of patients is large, the crowd of patients is complex and varied and the kinds of disease have great variety. We should strengthen practice in pediatric outpatient so that medicos could master the diagnosis and treatment of pediatric commonly encountered disease, frequently encountered disease, special diseases and therapeutic principle to emergent and critical patients and laid a strong foundation for their further clinical work in the future.

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