Clinical Magic and the Art of Examining Children

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In examining children, clinical skills are a blend of specific examination techniques and a perceptive approach to a child during a clinical encounter. This paper applies the concepts of awareness, contact, and closure to the physician-patient relationship and describes specific techniques and behaviors that can aid in the achievement of the major objectives of the clinical encounter: (1) performance of an examination and obtaining the necessary diagnostic information, (2) development of a positive physician-patient relationship, and (3) observation of the parent-child subsystem during the office visit.

At some point in their training and practice, most clinicians are faced with the task of examining children. An experienced student or resident may struggle with the examination process, trying to obtain accurate clinical observations, only to elicit sheer terror and shrill screams from the child and personal feelings of frustration and hopelessness. Seeking help in the process, the learner may turn to a clinician more experienced in working with children and stand amazed at this clinician's apparently magical ability to approach and examine the same child in a way that elicits clinical data in a pleasant, cooperative manner. Without specific guidance and instruction the process of performing a cooperative examination of a child may appear to be clinical magic, employing secrets known only to the magician. The student or resident may wish to give up the seemingly frustrating experience of working with children altogether. The purpose of this paper is to help demystify this seemingly magical power and bring to a clinical reality the behavior and technique that make the process of examining children pleasant for both the child and the examiner.

Basic textbooks of physical diagnosis focus on the specific procedures of examination, such as stethoscope and palpation techniques, and give some consideration to behavioral approaches to children.1 Pediatric texts discuss the merits of gentleness and kindness in examining children.2 Smilkstein,3 in discussing the pediatric lap examination, has described a method for examining young children that incorporates physical examination techniques and concern for the comfort of the child and parent. Yet to be effective, the lap examination requires the examiner to "maintain a friendly, warm, unhurried and informal attitude."3 All authors mention specific methods for examining children, but they leave some uncertainty as to specific behavior. How are gentleness or kindness translated into action? How are new clinicians to be taught to approach a child? Answering these

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questions translates clinical magic to a learnable reality.

Clinical Magic: Approaching Children in the Clinical Setting

In attempting to understand and teach the examination of children, it is useful to consider organizing this process around three general principles: (1) awareness, (2) contact, and (3) closure.

Awareness

Awareness may best be defined as conscious knowledge of an activity, process, or object. For purposes of learning the process of examining children, three types of awareness are useful: awareness of self, awareness of the parent(s) accompanying the child, and awareness of the child. A skilled clinician observes and notes his or her own actions and feelings and those of the parents and the child in the context of the examination process and then uses this information to initiate contact with the child. Experienced clinicians do this by reflex. New clinicians may require more specific guidance in developing this process and using it to initiate contact with the parents and the child.

Awareness of self may be considered conscious knowledge of emotional and physical states. Emotional awareness of self implies cognitive knowledge of feelings prior to, during, and after the examination process. Children are good receivers and perceivers of the emotional state of an adult.4 The clinician who is feeling angry, sad, happy, or anxious from a preceding patient encounter may carry these emotions into the examination room, where they are displayed and a response is received from the child. Emotions elicited during the encounter may also influence the process of the examination. In particular, display of emotions such as disgust and anger with a patient or family may influence a child's response. New clinicians can assess their feelings before entering the examination room, and thus become conscious of their role in the developing contact with parent and child.

Physical awareness implies conscious knowledge of the physical self. Such awareness is important in two ways. First, emotions are portrayed in the physical state through actions and behavior.

Emotions not conveyed verbally can be conveyed by action, by inaction, or through body position. Second, in examining children, awareness of physical position, stature, and vocalization can aid initiating contact with a young child in a nonthreatening manner. In the examination process, actions clearly speak louder than words. Physical awareness includes knowledge of body position in relation to the child, taking into account height as well as distance. Physical awareness includes knowledge of vocalization (ie, tone, volume, and modulation) and an awareness of movements and motion. Awareness of the emotional and physical self allows the examiner to control the process of contact with the child and parent.

Awareness of the parents may also be viewed in an emotional and physical context. Awareness of the emotional concerns and feelings of the parents is developed in the interview process through listening to the content and meaning of parental statements. This emotional awareness includes a recognition of the multitude of emotions and feelings that may be experienced in the process of parenting-the joy, the frustration, the worrying, and the anger to name a few. Parents' apprehension and anxiety about the office visit can be transmitted to the child, resulting in a heightened level of fear. In this situation, awareness of parental anxiety can direct the clinician to make the parents more comfortable by directly and openly addressing their fears and concerns, which in turn can decrease the anxiety of the child.

Finally, the clinician can develop an awareness of the physical interaction between child and parent in the stressful environment of the office visit, including the nurturing and limit-setting behavior and discipline techniques of the parents.

An awareness of the child as an individual is equal in importance to knowledge of self and knowledge of parents. Recognition of the child as a person will immediately alert the clinical observer to the emotional status of the child. The observation will influence the style of contact. A child who is happy, playful, and bouncing around the room can be approached differently than a child who is slightly weepy, wide-eyed, and clutching at his mother. Awareness also includes recognition of the cognitive understanding level of the child. An 18-month-old child thinks differently from a 4-year-old child, and contact must vary depending upon this level.

Contact

The awareness of self, parent, and child influences the style and technique of contact with the patient. Contact is the essence of the examination process, for without contact, there is no examination. Physician-child contact is the element in the clinical encounter in which clinical magic is most apparent. The term contact implies a touching or a coming together. This touching may be verbal or nonverbal and clinically is a mix of both. Contact is a complementary process between patient and physician and requires negotiation between clinician and patient as to the limits of the encounter. Awareness serves as the foundation for this negotiation and helps determine the style of contact. Behavioral constructs such as gentleness and kindness are styles of contact composed of multiple verbal and nonverbal behaviors.

Initially, contact with the child and parent occurs through the nontactile senses of vision and hearing, and knowledge obtained from this initial contact will determine the style and methods of the examination. To influence the contact purposefully with the child and parents, clinicians must use their awareness in the process of initiating and continuing contact.

Visual contact occurs eye to eye and, in addition to giving information to the examiner, gives recognition to the child and the parents. Visual contact requires constant awareness of the components of visual contact. Direction of gaze is one important component. Eye-to-eye focusing is generally more comfortable than looking at another body part or inanimate object. It can be very disconcerting to attempt to communicate with someone whose gaze is focused over one's shoulder or into a corner of the room. Intensity of gaze is determined primarily by the duration of contact. A penetrating stare, for example, is an unremitting visual contact for a prolonged period of time. The clinician examining children can initiate comfortable visual contact by doing so eye to eye and by directing the gaze from child to parent in the course of the interaction.

Auditory contact requires self-awareness of vocalization. Soft volume tends to be much less threatening than loud volume, an important point in decreasing anxiety in a child faced with a strange adult figure. Musical rather than flat vocal modulation is also less ominous. Vocal tone is important. For example, recent work has shown that adults tend to speak to children less than 1 year of age in high-pitched tones.⁴ The clinician examining children in this age group should use similar vocalization. In addition, vocal content is important, and explaining procedures to the child as they occur can ease the performance of the examination. Finally, verbal content should be presented at a level of understanding appropriate for the child.

Recognizing that contact is ideally a complementary process means that the child and the parents also develop awareness of the clinician to whom they respond. Thus the clinician must be aware of his own body position in the examination room. A child's anxiety can be viewed as directly proportional to the child's distance from the parent and indirectly proportional to the distance from the examiner, particularly when separation anxiety is a factor, primarily in those children 6 months to 2 to 3 years of age. A visibly agitated or frightened child may require more physical distance from the examiner for a period of time to decrease the anxiety. Serving as a means of desensitization, the extra distance is gradually closed to a mutually acceptable position. Height is also important. The child and parent can be approached on their own level by the examiner. For example, the clinician may sit if the patients are sitting or stoop to perform the examination while the child sits in the parent's lap. Finally, rapid, abrupt movements tend to be much more threatening than slow, flowing movements. Thus the clinician performs more as a partner in a ballet than as a solo performer in a tap dance.

Movements lead to tactile contact, which may occur initially with the mother or father and involve hands rather than instruments. Such contact is facilitated when using the lap examination process as illustrated by Smilkstein.³ Initial touch in a soft manner is a large contributor to the behavioral construct of gentleness. Sharing of control in examination techniques requiring touch also eases the process for the child. The skilled clinician does not force the examination process, but when possible works within the limits set by the child. Stopping the examination occasionally and backing off for a second or two allows the child some control of the process.

For a child, instruments may pose the greatest threat in the examination, especially if a preceding experience involving them has been painful. Thus desensitization techniques are essential in introducing instruments to the child. Experienced clinicians have developed numerous methods for this purpose. Simply allowing the child to handle the instrument, whether it be the stethoscope or the oto-ophthalmoscope, will diminish the association with pain and allow the child to feel some control of the instrument. Some experienced clinicians use desensitization techniques that involve using the instrument on a parent or toy prior to proceeding to the child. An excellent example is the Norman Rockwell painting showing a physician examining a young girl's doll. The clinician can take a position next to rather than across from the child during this process; this makes the physician more of a partner than an adversary. An additional technique is incorporating play in the examination. A playful child can be engaged through game playing. An example is finding "bunnies in the ears" during the otoscopic examination. In the case of an ill child, awareness may lead the clinician to the conclusion that the best contact method is to perform the examination as quickly and efficiently as necessary to obtain the clinical data.

Closure

Closure is the termination of the examination process. Effective closure requires the physician to use awareness and contact to complete the clinical encounter. The process of closure entails summarizing the results of the clinical evaluation, clarifying any uncertainties expressed by the parent or child, and finally negotiating and contracting for further clinical evaluation.

Awareness of the family's concerns and their understanding of the clinical issues is useful in summarizing and clarifying the clinical assessment. Developing such awareness requires the clinician to listen actively to the statements of the parent and child and to observe their actions. This information can then be used to restate or reframe the results of the examination and its implications for the child's health.

In addition, awareness of the absence of a key family member can lead the physician to make arrangements to discuss the results with that member at a future time.

A primary component of the process of clarification is the elicitation by the clinician of any questions regarding the assessment and recommendations that have been made. Often this must be done directly and should include the child as well as the parents. The process of summarizing and clarifying leads to contracting for follow-up evaluation. Contracting is a mutual process requiring the parent and child to understand the recommendations as clearly as possible. Experienced clinicians may suggest the option of future telephone contact should additional questions arrive following the office visit.

Finally, termination of the visit can include physical contact through handshake or touch with parents and child as a way of conveying the physician's continuing care for the family. Closure involves saying good-bye with plans for further clinical contact clearly stated. Thus, the process of closure sets the stage for future clinical encounters with the family and provides the termination of the examination process.

Conclusions

When considered in the context of awareness, contact, and closure, clinical magic can become a reality that is teachable and learnable. With the increased availability of videotape monitoring of clinical encounters of medical students and residents, these clinical skills in examining children are easily demonstrated. The process of working with children in the clinical setting can become an enjoyable experience for children, parents, and clinicians. In addition, the performance of an effective clinical evaluation facilitates the achievement of the major objectives of the clinical encounter: (1) obtaining necessary diagnostic information, (2) allaying anxiety, when appropriate, in the parent and child and helping to develop an effective working relationship with the clinician, and (3) helping the clinician to make accurate observations of the parent and child subsystem during the office visit.

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