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Each of us travel a unique path and can come together to create.  
Endless possibilities and potentials exist. The sky is no limit!

# Healthcare Worldwide Central

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OUR COVER is designed by  
Dr. Mansoor Ahmed

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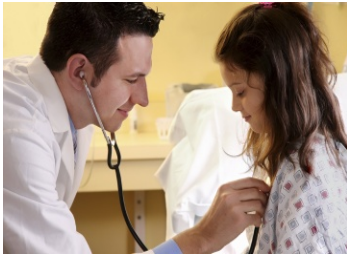
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# "CONNECTING THE EDUCATIONAL AND CLINICAL ESSENTIALS"

*Dear Worldwide Colleagues,*



Healthcare Worldwide Central e-magazine is an international e-magazine dedicated to publishing high quality articles, review articles, case studies, surveys, commentaries, news, interviews, reports, ethics, pharmaceuticals, and bio-ethics in Healthcare.

This magazine welcomes worldwide contributions. The intention is to distinguish forthcoming vision in the worldwide community. This is an Educational and Clinical

Essentials Community Service Magazine with a Worldwide cooperative reach. The e-magazine is published on a quarterly basis. There are four categories for clear, concise, educational and clinical essentials:

■ Announcements

■ Featured Articles

■ Insight Perspective

■ Clinical Corner

Please enjoy this issue.

The **Featured Article**, by Ashley Savio, offers a perspective of ADHD that is intriguing. In the creation of Community Learning Environments emphasis is placed on care, quality, awareness and observation. Ms. Savio earned her Associated Science Pharmacy Technology Degree from Santa Rosa Junior College. She is a graduate of Sonoma State University Student with a Bachelor major in Chemistry and minor in Biology. Currently she is pursuing her Doctorate in Pharmacy.

Parenting Saga proposes critical thinking discernment in the decision making process in the **Clinical Corner: Demystifying Parental Challenges**. "It characterizes parental attitudes regarding accreditation/licensing/certification and other factors that might influence selection of a medical facility, primary care giver/doctor, medical treatment options, toys and child care facilities for children."

**Insight Perspective** advances an Innovation Vision for the Department of Pharmacotherapy embedded in the hospital pharmacy. After reading the piece, Picture This! Dr. Rangaves asks "What do you think?"

Healthcare Worldwide Central provides quarterly educational and clinical essentials.

Best wishes,

Dr. Diana Rangaves, PharmD, Rph, CEO  
Executive Editor, Healthcare Worldwide Central

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# Mission...

Dear Worldwide Colleagues,

I hope these words find you well.

The mission of Healthcare Worldwide Central e-Magazine is to unite the community for professional collaboration and subject-matter expertise.

Healthcare Worldwide Central e-Magazine goal is to create a Community. This e-Magazine's purpose is to inform, educate, provide perspectives, publish peer reviewed papers, reviews, and articles related to Healthcare.

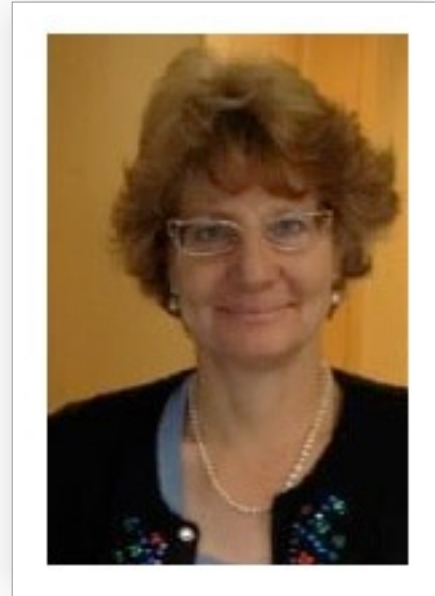
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Please send your contribution to my attention at  
[drangaves@clinicalconsultantservices.info](mailto:drangaves@clinicalconsultantservices.info)

Thank you for introducing and offering a unique opportunity for us to be of service.



Best wishes,

**Dr. Diana Rangaves**

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# Feature Articles...



## Pharmaceutical Technology and Techniques That Teachers Need To Encompass in Educating Children with ADD

Ashley Savio earned her Associated Science Pharmacy Technology Degree from Santa Rosa Junior College. She is a graduate of Sonoma State University Student with a Bachelor major in Chemistry and minor in Biology. Currently she is pursuing her Doctorate in Pharmacy.

What are ADD and ADHD, how is it being treated, and how are teachers effectively teaching these diagnosed children? These are the questions that I will answer and discuss throughout this article. “The first mention of ADHD (attention-deficit hyperactivity disorder) was in a poem by Heinrich Hoffman in 1865 when he wrote about “fidgety Philip as one who won’t sit still, wriggles, giggles, swings backward and forwards, tilts up in his chair growing rude and wild.” (Colberg, 2010, 9) Advancements in pharmaceutical technology have transformed the behavioral condition of attention-deficit disorder (ADD) and ADHD into a suitable lifestyle for the diagnosed children that attend educational environments. Attention-deficit disorder (ADD) and its relative attention-deficit hyperactivity disorder (ADHD) are neurological disabilities which elicit inappropriate levels of inattention, impulsivity, and hyperactivity. Some of the symptoms of a child being inattentive include: being easily distracted, failing to follow directions or finish tasks, poor attention control, an appearance of not listening, problems organizing daily tasks, frequently misplacing things, and tendencies to daydream. Symptoms of hyperactivity include: squirming, fidgeting, or bouncing while sitting; difficulty playing quietly, inability to stay seated, and excessive talking.

Symptoms of impulsivity include: difficulty waiting for his or her turn, blurting out answers before a question is completed and frequent interruption of others. (ADHD Facts) “ADHD is the most common diagnosed behavioral disorder in children. There is a higher ratio of boys to girls who have been diagnosed with this disorder.” (Colberg, 2010, 10) The causes for attention-deficit disorder are unknown but there are some similarities in children being diagnosed with ADD/ADHD. “Children with a low birth weight are diagnosed at 11.7 percent while; children with a higher birth weight are diagnosed at 8.8 percent. Children, who are raised in a family where the average income is less than \$20,000 a year, are twice as likely to be diagnosed with ADHD as a child who is raised in a family where the income is \$75,000 or more a year.” (Colberg, 2010, 20)

Other factors that Laura Colberg writes about in her article Classroom Management and the ADHD Student are that race and ethnicity, health, and the language a student speaks also contribute to the diagnosing of ADHD. Diagnosis of children of ethnicity and race from most to least is as follows: Non-Hispanic white children, Non-Hispanic black children, and children who are Hispanic. Poor health and English-speaking are also factors correlated with increased rates of ADHD diagnosis. Many medications are now used to assist children and adults with ADD/ADHD. The most common ones include: Adderall, Adderall XR, Ritalin, Ritalin LA, Concerta, Focalin, and Focalin XR. These medications are stimulants, and their method of action is to “regulate impulsive behavior and improve attention span and focus by increasing the levels of certain chemicals in the brain, such as epinephrine and norepinephrine,



which help transmit signals between nerves.” (ADHD Facts) The medication prevents these hormones from being quickly absorbed back in the body leading to a slower absorption that improves concentration abilities and alertness. (Sheryl 2011) The cost of ADD/ADHD medications ranges from \$20-\$220 per month, depending on brand or generic options. These drugs are also classified as Schedule II medications, indicating that they are determined by the FDA to have a high potential for abuse, and may induce severe psychological or physical dependence. (DEA 2011) Side effects of these drugs include decreased appetite, weight loss, stomachache, headache, nervousness, trouble sleeping, and dizziness. (Sheryl 2011) There are some newer medications that are non-stimulants that are FDA approved to treat ADD/ADHD, such as Strattera and Intuniv, which both improve concentration and impulse control. Ritalin was the first drug that was FDA approved in 1961 for treating children with behavioral problems. However, “[it] fell out of favor in the early 1970's after charges and a congressional hearing which it was being used as behavioral modification among poor, inner-city kids. In 1971, the DEA imposed strict production and import quotas on methylphenidate (generic name for Ritalin), which remain in effect today.” (Russell, 1997) In the 1980's Ritalin made a comeback, in the form of increased use primarily among white, middle-class children. Other drug companies took notice and began developing similar medications such as Adderall, Focalin, Concerta, and the extended release versions thereof. The Drug Enforcement Agency (DEA), “which monitors the production of methylphenidate, a stimulant, held a special conference last year (1996) to call attention to Ritalin's growing use in the United

States, where 90 percent of the worldwide supply is prescribed.” (Russell, 1997) Purportedly, while only 900,000 American children were taking Ritalin in 1990, in the present day, that number has increased to 2.5 million children. (Russell, 1997).

David A. Kessler, MD, dean of the Yale University School of Medicine in New Haven, CT, and former commissioner of the Food and Drug Administration (FDA), stated that 'Ritalin is a very important drug. Well prescribed, it can make the difference between a functioning child and a child who has very significant problems. The hard thing is to determine for which child it is appropriate. It's widely over prescribed.' (Russell, 1997) Dr. Kessler explains how he sees an enormous abuse potential in high school students and the student's parents wanting the child to ace their standardized tests, study better for exams, and “pave their way for acceptance letters from top-drawer colleges.” (Russell, 1997) Ritalin has also become a drug of abuse in middle schools. Children are sharing their own “prescription medications or selling their pills to friends who crush them up and snort the powder for a quick high.” The result of this has led to “increased drug dealing among thirteen-year-olds, plus several teen deaths.” One psychologist even sees it as a “gateway drug,” helping lead children into future drug abuse, referring to it as “kiddie cocaine.” (Russell, 1997) Are these stimulant medications addictive in the long-term? One retail pharmacist agrees: “There is a large controversy over whether or not the medications are addictive or not. Over a long period of time, yes, I do believe they are addicting. Short period of time, no.” (Sheryl 2011) The medications are stimulants, and cause improvements in one's ability to do better in school and focus. Such



actions sound like the work of a wonder drug, which makes it quite understandable how people could want to continue taking it--and indeed, after a time, develop a perceived need for it, due to feelings of incompetency risked by being without it.

Statistics suggest that some 80 percent of the children currently diagnosed with ADHD are boys. (Russell, 1997) While bona fide ADD/ADHD is of course at hand, misdiagnosing is also suggested by this statistic, according to one neurologist--who posits that boys are uniquely seek a phase of renewal, recharging, and reorientation, by seeking a "neutral rest state." "The boy in the back of the classroom whose eyes are drifting toward sleep has entered a neutral rest state. It is predominantly boys who drift off without completing assignments, who stop taking notes and fall asleep during a lecture, or who tap pencils or otherwise fidget in hopes of keeping themselves awake and learning." (Gurian, 2009, 290) It is easy to see how these activities--consequences of normal neurological function--can be perceived as the inattentive symptoms of ADD/ADHD per se.

"The U.S. Center for Disease Control stated that 7.8 percent of U.S. children from ages 4-17 are diagnosed with ADHD and that in turn means many teachers will have at least a few students with ADHD in every class taught." (Colberg, 2010, 5) This means that rather than simply managing one ADHD student in the classroom, a teacher may have two to four students with ADD/ADHD, and then has to ensure that these children are getting what they need to succeed while continuing to teach the whole group. Teachers need to remind themselves constantly that the students with ADD learn differently and that they need to be able to

manage the classroom effectively in being able to teach them without compromising the education of others. "By establishing certain practice teachers may promote appropriate behaviors in students. Establishing respect between students and teachers is important," Ms. Colberg indicates. (Colberg, 2010, 6) Teachers have a three-tiered responsibility with teaching a student with ADHD. First, general education teachers, responsible for assessing students' behaviors for identification purposes, need to be able to recognize symptoms and identify a child as potentially having ADHD. Three distinct subtypes of ADHD have been identified: inattention, hyperactivity-impulsivity, and the combined type. "Often, general education teachers recognize such symptoms before other professionals note them, and these educators' observations are critical" for the professional to compile a plan for the child, indicate Bender & Mathis, educational psychologists. (Bender, 1995) The second responsibility of the teacher is to be involved in intervention. "Teachers need to be able to alleviate the attention problem once a student has been identified as ADHD. Teachers must assist these students to increase their academic skills while decreasing their inappropriate behaviors." Finally, the third responsibility is for the teacher to monitor the efficacy of medical interventions, as their observations of daily classroom performance are instrumental in determining whether treatments are working. (Bender, 1995) Strategies for teachers, who may feel overwhelmed and frustrated while teaching ADHD students include the following tactics: establishing a routine and structure in the daily schedule, varying the presentation of the material, giving student's feedback, making academic tasks brief, varying verbal cues, and





enabling peer tutoring to support students. (Colberg, 2010, 13) If the material or its presentation is kept diverse, it can allow the child with ADD to focus more on the different aspects of teaching and learning. He or she won't be viewing the presentation or material in the same manner every day, and this can prevent him/her from becoming bored and easily distracted. The six classroom management strategies that Laura Colberg, a researcher in educational psychology, include increasing the role of positive reinforcements in learning; bridging previously taught concepts to new concepts being presented; providing students the opportunity to apply assimilated concepts; incorporating various cueing systems for recall and attention guidance; using contingency-based self-management techniques for difficult moments; and using self-monitoring of attention to increase the ratio of on-task behaviors. (Colberg, 2010, 16)

Ms. Colberg continues to state that a teacher is well-advised to use strategies to frequently check in with the student, ensuring that they are present, and/or returning their focus to what is going on in the classroom. She also emphasizes the importance of not treating the student(s) with ADD/ADHD differently than the rest of the class. (Colberg, 2010, 21) Just as crucially important as the previous statement is that the student has little control over their behavior and that they are not meaning to misbehave. Having table groups with other students who are focused can enable the student with ADHD to focus more on the task at hand. Allowing all of the children in the classroom to have “table buddies” will ensure that all students write down their homework, turn in their homework, and keep on task. Other ways that benefit students with ADD/ADHD to focus in school or at home is to

provide extra assistance, such as tutoring, monitor time watching television, have the child be involved in physically active activities (sports), have a designated quiet time, be involved in family household chores, arrange time for the child to be with friends, and have good communication between the parents, teachers, family, and medical professionals that are striving to help the child. (Sheryl 2011) Three unstructured strategies for teachers of students with ADHD include structuring the lesson, organizing the classroom, and monitoring. Tactics for better structuring the lesson include: providing clear directions for transition between lessons, planning for frequent breaks, the use of high-interest activities (computer activities, writing tasks), decreasing the length of tasks, teaching organizational and study skills as part of the curriculum, and teaching outlining skills. To better organize the classroom, a teacher might have a door that will block out distractions, display classroom rules and refer to them often, seat students away from noise, post daily schedule and assignments, place desks away from each other (space desks apart), and/or alternate activities to eliminate desk fatigue. Better monitoring can be achieved by visually monitoring behavior, discussing consequences of behavior, and applying self-monitoring strategies. (Bender, 1995)

Ms. Colbert asserts that teachers may exhibit flawed judgment, in that they often “do not see that ADHD is both a behavior and an educational issue. A classroom is where the behavior is the most noticeable and that some teachers see this as only a behavioral issue rather than an educational issue.” (Colberg, 2010, 12) She also indicates that teachers are required by their respective states to adhere to particular standards, and to assess their students in



light of said standards. That said, she indicates that the Department of Education Special Needs Division has provided informational resources on teaching students with special needs, such as those with ADHD. (Colberg, 2010, 17) Furthermore, with the passage of the No Child Left Behind Act (NCLB), and the reauthorization of the Individuals with Disabilities Improvement Act (IDEA), there is more accountability for the information being presented to the children. The students with diagnosed ADHD are held to the same standards as the remainder of the students in the general education classroom. J. Noll, an author on educational issues, suggests that the primary justification for inclusion, sometimes referred to as 'mainstreaming' in subject literature, has traditionally stemmed from the belief that disabled children have a right to--and can benefit from--inclusion in the common educational environment, when this is possible. In theory, this inclusion signifies the end of labeling and separate classes, seen as detrimental, but not the end of necessary supports and services for all students needing them--whether or not ADHD is the cause requiring said supports. (Noll, 2009, 232) Due to ever-evolving research on ADHD, the advancement of drug technology, and the effective ways in which teachers instruct their students, our current standards and best practices now assist students with ADHD to better focus and achieve their educational and life goals. Teachers need to be able to vary their daily routines to ensure that the students with ADHD are able to keep up with the material and not left to struggle. The proper use of classroom management strategies and medication can enable students with ADHD to grow in this ever-more-intricate world and be able to "keep up". Having

discussed what ADD/ADHD is, how it is treated, and how the teachers are effectively teaching diagnosed children, more questions nonetheless arise: How costly is it to effectively teach a student with ADD/ADHD? Why has there been an increase in prescriptions that treat ADD/ADHD over the years? Is there really one way to teach all children that are diagnosed with ADD/ADHD, and if so, what is it? As you can see, these behavioral conditions can be detrimental to human development in an already-demanding environment for these young students. The combined efforts of pharmaceuticals, and effective teaching strategies, proactively target these issues and are the only chance our society has at effectively helping these victims.

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Interview with Sheryl, Pharmacist, Raley's Pharmacy, California. 26 Nov. 2011. (See Attached)

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## Interview with Sheryl, Pharmacist

Took Place on Saturday November 26th, 2011 from roughly 2pm-3pm

- 1) What are some of the medications used to treat or help with students with ADD/ADHD?  
Adderall, Adderall XR, Ritalin, Ritalin LA, Concerta, Focalin, Focalin XR These are all considered to be schedule II medications.
- 2) How do these drugs work in the body?  
They stimulate the brain's production of norepinephrine and dopamine which are both associated with attention and behavior. The drug prevents these hormones from being quickly absorbed back in the body this slower absorption improves concentration and abilities and alertness.
- 3) Major side effects of these drugs?  
Side effects include: headache, decreased appetite, stomachache nervousness, trouble sleeping, and dizziness
- 4) Cost?  
\$20-\$220/month depending on brand/generic
- 5) Has there been an increase in prescriptions for ADD/ADHD over the years? If so, why?  
Yes schools are requiring it if the child has ADD/ADHD. Generics are now available which decreases the cost. There are more choices of ADD/ADHD medications out there. There are now extended-release versions of these medications so that students can take 1 pill and it should last 12 hours. Since parents are working more this causes less time to be spent on the child which causes the child to act out more.
- 6) Over a long period of time of usage, would you consider these medications to have addictive properties or behaviors?  
There is a controversy over whether or not the medications are addictive or not. Over a long period of time, yes, I do believe that are addicting. Over a short period of time, no they are not.
- 7) Besides medication is there any other way to help a student with ADD/ADHD focus?
  - \* Extra assistance, tutoring
  - \* Watch less TV
  - \* Be involved in active activities such as sports
  - \* Have quiet time
  - \* Be involved in family household chores
  - \* Arrange time to be with friends
  - \* Good communication between parents, teachers, family, and doctor.

Side Information That Sheryl Brought Up: What happens when more than ½ of the classroom is medicated on these drugs and most of those children are not ADD/ADHD diagnosed? Are they having an advantage over the non-medicated children? If so, is this fair?

Content Reviewed and prepared for publication by Dr. Miles Conde, Pharm D, Associate Editor,





# Insight Perspective

Vision ~ Practice Innovation ~

## Visualize this:

The Department of Pharmacotherapy is embedded in the hospital pharmacy. Three pharmacists and two pharmacy technicians are involved in providing direct patient care services, ensuring access to community resources, assisting patients with transitions of care, providing inter-professional education, and participating in continuous quality improvement initiatives. The pharmacists serve as clinical pharmacist practitioners and provide medication therapy management services in a pharmacotherapy clinic, anticoagulation clinics, and an osteoporosis clinic and via an inpatient family medicine service. Multiple learners such as pharmacy technicians, student pharmacists, and pharmacy residents rotate through the various pharmacy clinics to learn about pharmacotherapeutic principles.

This is a comprehensive, patient-centered, team-based approach to population management. Pharmacists and pharmacy technicians play a vital role and make fundamental contributions to patient care across health care settings. Such innovations in the care setting create unique niches. What do you think?



## What Do Pharmacists Do?

People frequently assume that all a pharmacist does is count pills, or pour liquids, and place the correct amount in a bottle.

Actually that perception is far from accurate!

Pharmacists do much more. What are some of the responsibilities that a pharmacist carries?

- Pharmacists counsel patients on medications that they are taking or picking up.
- Pharmacists counsel patients on over the counter medications.
- Pharmacists make sure that the dose prescribed is correct.
- Pharmacists make sure that drug-drug interactions are not possibly dangerous, poisonous, life-threatening, or cause unintentional harm (of course, things happen for no apparent reason, but it has to be within a reasonable doubt).
- Pharmacists compound medications, if a specialized dose is needed.

### What is counseling?

Counseling is when a pharmacist goes over your medications with you, explaining how to use the medications properly, and how to make the medication therapy fit into your particular lifestyle. Pharmacists go over some potentially life threatening side effects and what to do if you are experiencing one. Pharmacists will tell you when to seek further medical attention. A pharmacist is able to address any concerns or questions one may have regarding medication. Pharmacists are able to answer medical issue and insurance questions.

What other things can a pharmacist do?

Pharmacists run anti-coagulation clinic, diabetes clinics, and medication management clinics.

This means that pharmacists under the supervision of a physician or physicians group can monitor patients' treatment. A pharmacist, under protocol, can call in refills, change or modify the doses of medications specified within the protocol, and adjust treatment based on clinical findings.

Medication management clinics go over all medications a patient is taking, the when, why, and how. They make recommendations to the physician for any possible changes to make medication therapy easier to handle.

Diabetes clinics adjust a patient's diabetes medications, so that a person reaches their goals, in terms of their blood sugar levels.

Anticoagulation clinics adjust a patient's warfarin or Coumadin doses to make sure that a patient does not clot or bleed out.

These clinics use a pharmacist's expertise in drug knowledge to make a patient's life much easier by making sure that the patient is being monitored for any changes. This allows patients more frequent interactions with a pharmacist and make sure that a patient's therapy is going well. Generally speaking, pharmacist run clinics are for those patients with multiple disease states, many medications (which increases the risk for drug-drug interactions), or for those not very good at taking their medications (or are non-compliant).

What else?

Pharmacist can administer vaccinations to patients. This does depend on the state; however, in most states, pharmacists are allowed to administer the flu shot. This allows patients access to flu shots when physician's office are closed or on the weekends; making it easier to make sure that those at high risk get these potentially life saving vaccinations.

Not only does your pharmacist count your pills or pour out liquid medications, but they can talk to you about a great many things; most frequently as it relates to your medication therapy!

Efrat is currently working at Mountain Park Health Center, working as staff pharmacist and in their Coumadin Clinic. Efrat works under the Director of Pharmacy, Alana Podwika, and Pharmacy Supervisor Stanley Paul Kudish.



## Demystifying Parental Challenges

### DISCLAIMER

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### ABSTRACT

This paper is an outcome of a copyrighted survey conducted during the year 2011 at several reputed U.S. universities and various parenting groups. Summarizing the survey results, the paper presents the factors that most parents or providers consider critical for a parents decision making. It characterizes parental attitudes regarding accreditation/licensing/certification and other factors that might influence selection of a medical facility, primary care giver/doctor, medical treatment options, toys and child care facilities for children. Further, it analyzes how such factors change based on a parent's gender, age or professional background and during various stages of a child's development. The paper also captures the influence of word of mouth (WOM factor) promotion and internet reviews for choosing products and services. It can be useful for parents to learn from the experience of other parents.

### ARTICLE

Advancement in medicine, technology and changing lifestyle has brought us to the crossroads where we encounter numerous choices for every product and service. Parenthood brings along added responsibilities where parents have to choose from a plethora of options for the best product and service for their children. When it comes to choosing a medical facility, primary care provider, treatment option, toys, games, educational books and other merchandise, parents want to provide the very best to their children. A parent's decision making process may get influenced by the core aspects and vital characteristics of the products and services. Core aspects are the defining characteristics using which a parent filters the options for products and services. Vital characteristics are the attributes strongly desired besides the core aspects that enhance the appeal of the products and services. Such factors may change based on a parent's gender, age or professional background and during various stages of a child's development. It is challenging to familiarize with every available product or service. Thus, it is imperative to identify the factors that parents find most helpful.

### METHODOLOGY

An anonymous web-based survey was administered in the year 2011 at several reputed U.S. universities and through parenting groups to a random sample of adults over 18 years of age, where the participants were presented with 62 multiple choice questions and 11 qualitative questions. Each multiple choice question used a scale of 1 - 5 to help identify the importance of a factor where 1 denoted that the factor is least preferred and 5 denoted that the factor is most preferred. For the qualitative questions, participants were asked to rank the top 5 factors to identify relative importance in their order of preference. Target participants were parents and providers including medical professionals, academicians, and executives offering products and services for children. For the survey, a parent was defined as a participant who is the parent or legal guardian of a child 17 years of age or younger in the same household. Participants responding as providers were asked to highlight the level of importance they perceive a factor plays in driving a parent's decision. Products and



services studied included medical facility, primary care providers, treatment options, toys, games, educational books and other merchandise, and child care facility. Comparative analyses were made between male and female respondents, parent age groups, child's age group, participant in medical or non-medical profession and participant responding as a parent, a provider or both. The survey highlighted that both men and women within the sample population agreed on almost all factors affecting their decision making process. The survey was determined by the Western Institutional Review Board (WIRB) as being exempt from IRB review under 45 CFR Part 46.101(b)(2).

### **MEDICAL FACILITY**

Choosing a medical facility can be quite an ordeal. The survey found that the factors deemed important when choosing a medical facility vary by the age and prior experience of the parent, age of the children, and whether the respondent is a parent or provider. Parents in the 25-44 year age group preferred convenient location, word of mouth recommendation, and a family friendly facility that promote provider-parent discussion as significant factors in choosing a medical facility. Parents with an infant or toddler preferred convenient location, number of years the facility has been in operation and family friendly space as more important factors than parents who have preteen-teens children. Participants from a non-medical profession expressed more preference to insurance coverage and accreditation/licensing/certification than participants in the medical field. The former also tend to rely more on word of mouth recommendation and consider more number of years in operation as important factors in their decision making. On the other hand, participants from medical profession gave more preference to facilities offering a place for parents to stay. Lastly, parents tend to give more focus on accreditation/licensing/certification and word of mouth recommendation when compared with providers. When participants were asked to rank their choices, the top influencing factor was accreditation/licensing/certification (JCAHO or ISO 9000) where the facility is overseen by an outside agency. Accreditation and certification helps strengthen patient confidence in the quality and safety of care, treatment and services offered. The second preference was good reviews for high quality of care, having the best doctors and offering the latest treatments. Third important factor was compassion and adaptability to patient needs as

children can easily be frightened and parents want their child to be comfortable and calm. Fourth factor was co-care of children where parent, as well as child (when applicable), is full participant in care planning. Parents may not be well versed in medicine but as parents they understand every ache and pain of their child. Provider-Patient discussion is also important because the parent not only gets to understand the doctor's knowledge but also can validate their decision to go to the facility as through the discussion they get a glimpse of how good the doctor or the nurse is. One participant listed co-care as being tantamount to remaining with the practice. Location means a lot unless it is a very specific, serious issue in which case the most important factor is quality. Cost remains an important factor as parent's desire low cost for best treatment and chooses a facility which accepts their insurance.

### **PRIMARY CARE PROVIDER**

Preferences for choosing a primary care provider also varied among different participant groups. Parents in the 25-44 year age group preferred convenience of location, word of mouth recommendation and promoting provider-parent discussion as deciding factors in choosing a doctor. Parents with an infant or toddler preferred promoting parent-patient involvement during treatment, convenient location, and word of mouth recommendation as more important factors than parents who have preteen-teens children. Participants from non-medical profession preferred insurance coverage, parent-patient involvement during treatment, board certification, convenient location, number of years in practice and whether or not the doctor is member of professional association. Participants who were providers also preferred doctors who promoted parent-patient involvement during treatment. While, participants who were parents are more interested in whether the doctor primarily treats children and word of mouth recommendation from friends and family. These preferences also varied based on whether a parent is looking for a general pediatrician or a specialist. For general pediatrician, location, convenience, cost, and referral from family or friends are important factors. For a specialist, expertise, use of latest medical technologies, detailed provider-parent discussion, compassion and adaptability are more important. When participants were asked to rank their choices the top influencing factor was compassion and adaptability to patient needs as the child has to feel





comfortable, or she would not go to the doctor or worse not inform her parent when something might require medical attention. Moreover, both the parent and the child need to feel that they are being treated as a person instead of a number. The second preference was board certification; such as from AMBS, where the provider has passed special tests with above average competency. Certain situations may also call for seeking professional opinion from more than one physician. Third important factor was co-care of children where parent, as well as the child (when applicable), is full participant in care planning. Provider-Patient discussion is also important because the parent gets to know that the doctor cares about their problem. One participant suggested selecting a doctor who also considers traditional and alternative treatment options. Other important factors were word of mouth recommendation and choosing a provider who primarily treats children. She pointed out that illnesses are not the same for adolescents and adults. Cost remains an important factor as parents want lowest cost for best treatment and choose a provider who accepts insurance. Though most participants considered number of years in practice as important; one participant pointed out that number of years in practice can have a negative impact on parental choice. This participant fears that some older physicians may not be up to date on latest medical advancements and practices.

## TREATMENT OPTIONS

Advances in medicine have produced miraculous treatment options for many diseases. But, such advances also bring along challenges for parents who have to choose from several over the counter branded and generic drugs available. Parents in the 25-44 year age group preferred ease in administration and recommendation for child's age group as significant factors in choosing treatment options. Parents whose youngest child is an infant or a toddler preferred number of years in market as the most significant factor in choosing treatment options. Participants from non-medical profession focused more on whether a treatment option is recommended for a child's age group, number of years in market, alternative easily available, pharmacist input and if it has been previously recalled than participants from medical profession. This is understandable since participants in medical profession may be more informed. While, participants who are parents were most concerned about

whether a treatment option has been previously recalled. When participants were asked to rank their choices the top influencing factor was whether the treatment option has previously been recalled. One participant commented that she does not want to test a medication on her child. The second preference was number of years in market as long standing use helps gain confidence that there are fewer things wrong with the treatment and all kinks and mishaps have been worked through. It also helps to differentiate between treatments that are too new compared to others which may be outdated. Third important factor was pharmacist input as they are well trained in medications. Moreover, if the prescription does not already have what treatment is to be administered or if there is no prescription, then a pharmacist's input comes in very handy in educating what options are available. One participant suggested selecting a treatment that is available as branded, generic or has alternatives as she believes that it is always good to compare different options. Another participant suggested conducting research on ways to effectively ward off or deal with illness naturally such as diet, exercise, fresh air, adequate rest, herbal supplements and vitamins. Anything that could work either as a preventative or as a substitute to a drug is safer. While another preferred noninvasive/non pharmacological treatment, or easily administered treatment recommended for the child's age group as the treatment cannot work if the child will not let the parent administer the treatment. Other important factors were word of mouth (WOM) recommendation and cost as some treatments can be too expensive. One participant also expressed importance of considering side effects of a treatment to determine whether to consider or reject it.

**Toys, Games, Educational Books and Other Merchandise**  
Depending upon the item, the choice material for a toy varied but majority of the parents preferred items made from cotton and wool. Wood was the second preferred material followed by plastic. Parents in the 25-44 year age group preferred choosing toys, games and other merchandise that enhanced learning. Participants from non-medical profession focused more on whether a toy or a game is safe, enhances learning and promotes parent-child involvement. Participants who were parents also preferred toys or games that enhanced learning and promoted child empowerment. When participants were asked to rank their choices the top influencing factor was safety and the item may not have previously been recalled. There are too many toys that are



available in the market and if a safety issue is identified, the item must be recalled immediately. The toy must have no small parts that could cause choking; it must have no lead paint, and it should be safe for the baby to put in mouth. The second preference was for items that drive a child's imagination and promote empowerment which is very important for the overall development of the child. Third important factor was for the item to be educational and appropriate for the child's age or developmental level. Moreover, the item needs to be harmonious to child's personality. A child will enjoy an item based on her personality. One participant suggested selecting an item that would be useful in the car or for situations where the child may get bored. Another participant expressed the importance of parent child interaction but added that if a child wants to play alone that is a good thing too. Cost and durability play a bigger part in choosing toys, games and other merchandise than selecting a medical facility, primary care provider or treatment option as an average parent cannot spend too much on toys and games.

### DAYCARE

Parents in the 25-44 year age group preferred accreditation/licensing, convenient location, cost and promoting parent child involvement as significant factors in choosing a Day Care. Parents whose youngest child is an infant or a toddler preferred accreditation/licensing, convenient location, and cost. Participants from non-medical profession focused slightly more on cost, convenient location, promoting socializing skills among children, promoting parent-child involvement, word of mouth recommendation and internet reviews than participants from medical profession. When participants were asked to rank their choices the top influencing factors were hours and location. Hours are important especially for those who work long hours, in shifts and on weekends. The second preference was accreditation/licensing and safety record. As a parent, it is critical to know that the child is safe and is in the hands of professionals who will provide a safe environment. Third important factor was promoting socializing skills. It is good for children to learn to get along starting at a young age. Other important factor was child empowerment as every child needs to be made to feel that they can do it. One participant suggested for the parents to grab a feel for the environment their child would be exposed to, review materials that would be presented to their child, and meet the teachers their child

would interact with on a daily basis. It is important for parents to evaluate their lifestyle and the child's individual needs to see if the setting is right for their child. Participants expressed interest in being involved in care and development of their child but they also expressed giving the child enough space to develop her individuality. The survey highlighted that word of mouth recommendation and internet reviews play a bigger part in choosing a day care than selecting a medical facility, primary care provider, treatment option, toys, games and other merchandise.

### CONCLUSION

Parental attitudes vary regarding accreditation/licensing/certification and other factors that might influence selection of a medical facility, primary care provider, medical treatment options, toys and child care facilities for children. Accreditation/licensing/certification plays a significant role in comparing one product or service from another. Almost all participants emphasized the importance for primary care providers being board certified, compassionate, and having passed written tests to gauge competency. Though, it is unclear how many parents actually verify the same. Word of mouth (WOM) recommendation from family and friends has historically played an important role in decision making but parents, especially younger generation, are also turning to the internet as a valuable tool to self-educate before making a purchase. It would be helpful for product manufacturer and service providers to disseminate pertinent information that helps parents make a decision. Yet, given the ever increasing number of options available across the discussed products and services, reliance on WOM would continue, if not increase, in future.



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