

# EXCESSIVE LEAD IN DRINKING WATER SCARE REQUIRING BLOOD TESTS

Excessive amounts of lead in drinking water were discovered throughout Hong Kong in early July 2015. Affected citizens, including babies and children who are under six years old, were arranged to take a blood-lead-test in different hospitals. Luckily, our hospital play specialists (HPSs) were invited by various hospitals to assist the children with the blood taking procedure. HPSs know the needs of hospitalized children well and are experts in communicating with children as well as in providing support to facilitate medical treatment through play. In the blood-lead-test period, the HPSs cooperated well with the medical teams to assist the children to bravely and compliantly undergo the procedure, strengthening them to face similar tests in the future.



### PLAY INTERVENTION IT WORKS EVERY TIME

In the photo, Mr. Philip Choi (centre), The General Manager of Princess Margaret Hospital, personally wrote a thank-you letter to Playright for their professional help. He appreciated how our hospital play specialist created such a pleasant and peaceful atmosphere in the hospital as well as the delivery of such effective support to the children by relieving their stress about these medical procedures.

On successive weekends, the Playright hospital play specialists mobilized to rapidly form a special team. Most affected children had never been admitted to a hospital, never mind having experienced blood taking. Therefore, the HPS team focused on creating a child-friendly environment and arranged appropriate psychological preparation for the children. The corresponding measures included the setting up of various play groups, where they provided distraction and medical procedure simulations through play.

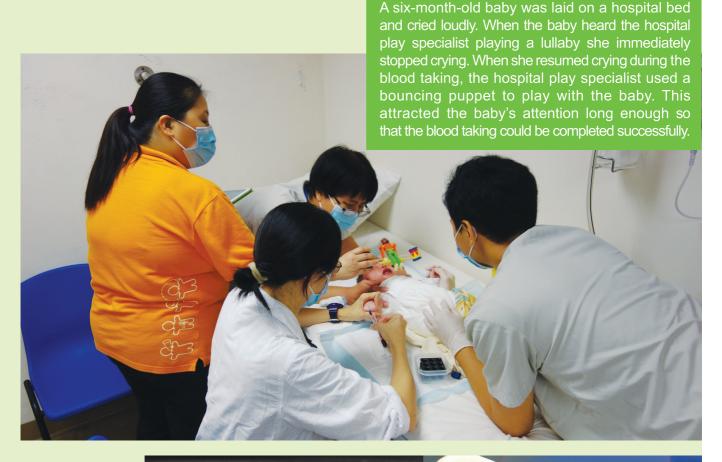
The Playright hospital play specialist had arranged that when children first walked into the outpatient

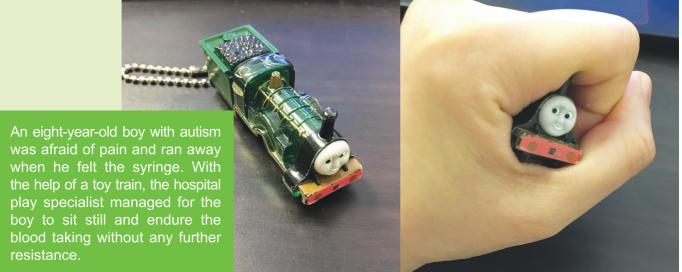
service, caring volunteers carried out arts-and-craft activities with them. It helped the children to relax as well as to occupy their waiting time. Once the children entered the treatment room, the hospital play specialist used age-appropriate distraction games and/or medical procedure simulation games as a magical tool to explain the procedure of blood taking. The correct understanding of a blood taking procedure and positive psychological preparation effectively reduces children's fear thereby helping them (and the medical and nursing professionals) to complete the test quickly and successfully.



The five-year-old boy in the photo misunderstood that a worm would be taken out from him during the blood taking. The blood-taking simulation toy and simple explanation helped to rectify his misunderstanding. After he had gained a clear understanding of the blood taking procedure, he reversed the role from being a patient to becoming a doctor who happily "drew blood" from a doll.









The four-year-old girl in the photo cried and held her mum tightly as she refused to have her blood taken. In response, the hospital play specialist led the girl to the arts-and-craft area to do some drawing. Then she played a syringe game with her, including a colourful balloon for encouragement. What happened next? The girl shed only a few tears during the blood taking with the balloon tightly in her hand - everyone was satisfied!



The blood-lead-testing has united the medical departments across hospitals as one.

### **OUR HEARTS ARE** WITH THE CHILDREN SERVICE COMES FIRST

Since our first special team from Princess Margaret Hospital devoted its assistance to the blood taking procedures, we have received similar requests from Caritas Medical Centre, Pamela Youde Nethersole Eastern Hospital and Tseung Kwan O Hospital. The insight into the urgency of the incident and the worries of parents regarding their children's health, lead our special teams to decide unanimously to give up their Saturdays and Sundays from August to November of 2015. The special teams worked tirelessly to visit the various hospitals with the aim to help the children complete the blood taking without any negative but hopefully positive long-term effects.

From previous experience, we deeply realized the importance of prior discussions with the hospitals in such an undertaking as described above. Fortunately, the hospitals also recognized our contributions as they invited our hospital play specialists to attend the action meetings regarding the blood-lead-test. The hospitals also proactively assisted our services in the aspects of crowd control, venue hiring and smoothing the procedure of our programme. This collaboration achieved to introduce child-friendly measures and appropriate support to satisfy the physiological and psychological needs of children.

### **TURNING CRISES INTO OPPORTUNITIES**

### A VALUABLE LEARNING **EXPERIENCE**

The blood-lead-test experience has consolidated our unremitting belief that play is the most effective medium for children. Play can turn children's tears into smiles; while they concentrate on play, they can complete a blood taking procedure effortlessly. Children can cope with fear bravely when they attain age-appropriate encouragement and with a little help from a sticker or balloon. The great strength of play has been repeatedly confirmed from the parents' sharing and medical personnel's experiences. These accounts consolidate the recognition and support of various stakeholders toward our hospital play services.

We strongly believe that despite the misery felt in the event of an illness, an optimistic, positive attitude can conquer the anger, anxiety or sadness. In order to achieve exactly that with sick children, we are keen to proactively promote and use play. This creates the opportunity for each child to not just develop an optimistic understanding, but to gain confidence to face challenging future moments, making this a valuable lesson of personal growth.

### **ABOUT LEAD**

- The World Health Organization Guidelines for Drinking-water Quality has set a provisional guideline value of not more than 10 micrograms per liter.
- When lead is absorbed into the body in excessive amounts, it is toxic to many organs and systems. Depending on the lead level inside the body, significant exposure to lead is associated with a wide range of effects, including neurodevelopmental effects, anaemia, high blood pressure, gastrointestinal symptoms, impaired renal function, neurological impairment, impaired fertility and adverse pregnancy outcomes. Infants, young children, pregnant women and lactating women are more likely to be affected by its adverse effects.
- · Whole blood lead level is internationally recognized as the most accurate and reliable method for screening and diagnosis to assess the risk of lead on health. For children, pregnant women and lactating women, a blood lead level of equal to or more than 5 microgram requires further assessment. For adults, a blood lead level of equal to or more than 10 microgram requires further assessment. Hair and urine tests for lead are not suitable for screening and diagnosis. They are therefore not advisable.



The hospitals proactively assisted HPSs to create child-friendly environment for affected children.



Some blood taking was arranged to take place by kindergarten class. Their teacher, being the most reliable and familiar person of the students in those circumstances, became a temporary member of the bloodtaking-team. They quickly learned to work and cooperate with the doctor, nurse, phlebotomist and hospital play specialist during the procedure.



HPSs special term has collaborated with Princess Margaret Hospital to complete the final session of blood taking procedure for affected children.



### **CHALLENGES**

Ying Shan's brain is relatively small compared to other infants of the same age. The doctor diagnosed her to have epilepsy but no cause of her illness can be found. Due to this illness, Ying Shan's has poor vision and her gross motor and fine motor skills are delayed compared with her same-age peers. Ying Shan cannot sit or crawl independently.

By the time she was eight months old, the seizure

were getting worse. Ying Shan had to be hospitalized more frequently and the period of hospital stays have been getting longer. Due to the limitations of the hospital environment and her abilities, Ying Shan spends most of her time on lying on the bed or in her mother's arms. It is difficult for her to explore the sensory stimulation of the outside world.

# **NFORMATION CENTRE**

### What is Epilepsy?

Nerve System consists of billions of nerve cells. Under normal circumstances, each cell contains a slight current. Epilepsy is basically caused by abnormal electric discharges by the nerve cells, leading to a range of functional disorders of the brain. Epilepsy is defined as the tendency to have recurrent seizures spontaneity.

Around 1 out 100 children is diagnosed to have epilepsy. Most of the causes are unknown; some of them are related to genetic factors. The symptoms of epilepsy vary between patients and may include absence seizure, clonic seizure, and tonic seizure among others. Since children's brains are developing, epilepsy can trigger different levels of influence that should not be neglected.

### **DEVELOP THROUGH GAMES**

Ying Shan has been in our care shortly since she entered the hospital. After an assessment, the hospital play specialist (HPS) thinks her situation is of great urgency since they should seize the golden period of child development. Therefore, the HPS has designed a developmental play plan according to Ying Shan's abilities and interests mainly to stimulate her senses. This will help to enhance her cognitive, language, social-emotional and physical development.

Even though Ying Shan's vision is relatively weak. she would stare at the hospital play specialist every time with great intent. The hospital play specialist wears an orange uniform and this prompted her to choose colourful tools and toys to carry out play. Apart from vision stimulation, the hospital play specialist would consider whether the chosen toy or tool has a function of hearing and/or tactile stimulation. Plastic play items that can make a sound and clothed rattles with different textures are Ying Shan's favourite toys.



The hospital play specialist lets Ying Shan sit on the "Turtle shell helmet" and plays merry-go-round in her mum's company.

Ying Shan is sitting on the "Turtle shell helmet" and does not forget to grab her favourite rattle



Colourful and multi-textured toys are Ying Shan's favourite.



Ying Shan is beating the drum which stimulates her senses of vision, hearing and touch.

Other than static play of touching and shaking. there are certainly many dynamic activities suitable for Ying Shan. A toy named "Turtle Shell Helmet" by Ying Shan's Mum actually is an award-winning, wave-shaped and multi-functional toy called Bilibo. Ying Shan can sit in it and experience a slow version of a merry-go-round or it can become a percussion toy to beat. The former one helps to enhance her sense of balance and extensity, while the later version allows her to understand and explore the causal relation between sound emission and vibrations. However, from Ying Shan's perspective, these are all fun things to do.

## INFORMATION CENTRE

### What is Developmental Play?

It exposes to opportunities appropriate to a child's age which promote any aspects of their development. It includes sensory stimulation play to stimulate or excite the five senses in vision, hearing, taste, smelling and touch. 0 - to 2-year-old infants are said to be in the Sensor Motor Stage, in which they explore the world through the five senses and practical actions so as to induce the brain development. Since hospitalized children live under less than optimal conditions, the hospital play specialist would design suitable play activities according to the children's individual needs in order to facilitate ongoing healthy development whilst in hospital.

### **WATER-FUN CHALLENGES**

Being hospitalized is inevitable for infants diagnosed with epilepsy. We strongly advocate that these infants obtain various play opportunities to explore and widen their horizons in the outside world, far beyond the walls of the ward and the hospital bed. After some discussion with the attending physician, the hospital play specialist decided to leave the sickroom and experience the water-world with those children which had been identified to be able to do so.



Ying Shan turns out to be an oustanding swimmer.

Swimming freely became a refreshing and unique experience for Ying Shan. Her mum witnessed how swimming brought joy to her daughter and understood how swimming is good for Ying Shan's health. She immediately bought an aerated tiny swimming pool at home so that Ying Shan would have more chances to enjoy swimming and grow up along the rough life journey.

### **Dr. Wong Kwan Yuen:**

"Thank you" to all the game designers for arranging different outdoor activities (baby spa and massage) for hospitalized children. Due to the physical limitations, most of the hospitalized children spend their time only in hospital and in bed, some of them requiring special care, such as having feeding tubes. Parents also have to spend a lot of time in hospital accompanying their children; it is rare for them to enjoy family happiness. Based on the joyful sharing of the parents regarding the activity, I believe it must have been an unforgettable experience for them. I hope that when the hospitalized children are in a stable condition, it can be arranged for them to take part in many outdoor activities so that they could have more opportunities to explore the world outside the hospital.



Mum is doing massage and warm up exercises for her daughter before going into the water.

Ying Shan is ready to go into the water.

Hospitalized children seldom have chances to play with water. For their parents, it is very surprising to see their babies enjoy water spa and massage experiences. In Ying Shan's case, it was her first time to experience water. Surprisingly, she showed no fear in the water; she even became very active which was very different from her usual behaviour in the hospital bed. She splashed and moved her legs and turned out to be the most outstanding swimmer among all.



Ying Shan's mum accompanies her and both enjoy precious family time

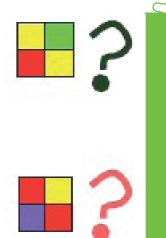
### INFORMATION CENTRE

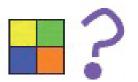
### What is Baby Spa?

Letting children start to swim from infancy helps to facilitate their health, physical and mental development. Children not only can experience real joy from swimming, but it is also beneficial to train up their physique, strengthen their cardiovascular functions and vital capacity and stimulate their brain development through the five senses. Thus, it is no doubt a type of comprehensive developmental play.









In the social world of Hong Kong adults, we politely exchange name cards to someone when we first meet. It facilitates understanding and communication between each other. Could we put this practice into a paediatric medical environment? What would be the scenario when a Playright's hospital play specialist meets a child in their care for the first time?

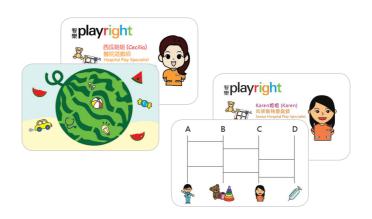
Actually, the name card has appeared and is fully used by the hospital play specialists! This special name card is tailored for children and its use is limited to children only. Therefore, it is truly designed by the concept of "providing a child-centered service". A hospital play specialist portrayed as a cartoon character wearing an orange uniform is the main feature of the name card. It further presents the warm and friendly hospital play specialists "Floral sister", "Bear Bear sister", "Strawberry sister", "Watermelon sister", "Cherry sister", etc. It further depicts various games and medical devices next to the portrait. On the reverse side, it shows different games, such as "Little maze", "Spot the difference", etc. Hospitalized children can play with and draw on the name card instantly once they receive it.

This unique name card should not be underestimated; it is not just a gift for hospitalized children during a first encounter, but even more so an effective medium to initiate conversation with them. Every time the hospital play specialist introduces herself by giving her name card to a child, it is received with a positive response from the children. Some shy children would have a smile on their face, others would say "Oh, the portrait is just likes you"

and some would show initiative to invite the hospital play specialist "Let's play together?" Some children are surprised and ask "Is it really for me?"

Hospitalized children need care as well as respect from others; in receiving the name card, the children receive a sense of self-worth. Therefore, the function of the name card extends far beyond initiating conversation and building up a relationship with the hospital play specialist.

Whenever parents witness the name card giving scene, they will smile and seem much more relaxed. The hospital play specialist will brief them how the hospital play service can help their child to ease their stress. The same name card is then presented to the parent(s) to give them the hospital play specialist's contact details (e-mail address, facebook and phone number) to facilitate future contact. Parent will show greater support once they realize their children can get appropriate care and stimulation through our services during their stay in hospital.





### SINCERE GRATITUDE TO THE MAJOR DONOR





Melco and its staff members have been sponsoring Playright's hospital play service also outside the hospital setting as they have supported outing opportunities for hospitalized children. The photo, taken in January 2015, shows a Melco volunteer team which cheered up 10 hospitalized children by taking them to Noah's Park together with Playright's play specialists, bringing much joy to the hospitalized children.

Ameico volunteer team and Playright's hospital play specialists transformed into a team of talented balloon twisters during their hospital visit and sent the children colourful balloon flowers and animals. It brought happiness to many children and gave the ward a positive and harmonious atmosphere.

Apart from supporting Playright's hospital play services, Melco sponsored the child-friendly decoration work at two playrooms in the Caritas Medical Centre to create child-friendly environment which will benefit many families in the future. The donation further included the purchasing of a series of therapeutic play tools to facilitate play interventions, as well as the making of playful leaflets for patients and their families to explain medical procedures. This will, no doubt, help to accelerate the children's understanding, adjustment and eventually their recovery.

Since the first encounter at Play Day (held at Jumbo Kingdom) in 2006, Melco Group has been generously supporting Playright's hospital play service. Under the guidance of Mr. Lawrence Ho, Melco Group's accumulated donation has reached HK\$3 million as of June 2016, over HK\$ 2.6 million of which were donated to develop and reactivate a suspended programme "Hospital Play Brings Vitality". The donation has kept the programme running for five years up to date.

Apart from funding to support the direct play

service for hospitalized children by hospital play specialists, Melco Group has been delivering care to hospitalized children through Playright play days, Playright Channels, giving of hospital play kits and Christmas gifts. Melco Group's unyielding support has helped many child patients and their parents to understand medical procedures in a relaxing and non-threatening way, thereby helping them to encounter medical treatment positively. Over 30,000 child patients have benefited from their services so far.

- In August 2015, the Ear, Nose, Throat Centre of Hong Kong Limited and ENT Laser Hearing & Speech Therapy Centre Ltd. donated HK\$25,000 to support our hospital play services. They also sent a volunteer team to assist our Flag Day Activity on November 21, 2015
- Mattel Corporate donated a great amount of high-quality toys to hospitalized children who are being served by our hospital play service.
- Lichi Charitable Foundation donated HK\$960,000 to fund our project of "Hospital Play Service at Pamela Youde Nethersole Eastern Hospital" to last until December 2017.
- Peterson Group Charitable Foundation Ltd generously donated HK\$12,000 to assist the purchasing of Christmas gifts for hospitalized children. They also sent a volunteer team to visit, play and give fine wrapped gifts to hospitalized children in the paediatric ward of the Pamela Youde Nethersole Eastern Hospital on December 17, 2015.
- Our special thanks goes to Dr. Yvonne Becher for her editorial guidance.

The above acknowledgement covers the period of August to December 2015.



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