70 per cent of children with cancer can be cured with modern therapy

bout 70 per cent of children inflicted with cancer can be completely cured, according to Australian paediatric oncologist, Dr Stewart J Kellie.

"Looking at the bigger picture, one in 600 children will develop cancer before they reach the age of 15 and about one in 2,500 children will develop a brain tumour before the age of 15," he told the media after the opening ceremony of the 16th International Symposium on Pediatric Neuro-Oncology (ISP-NO) held at Suntec Singapore Convention and Exhibition Centre (Suntec Singapore) on June 30, 2014.

Nevertheless, he said about 70 per cent of children with tumour can be cured with modern therapy.

"Many cases of children with cancer can be treated with chemotherapy; conditions like leukemia, 90 per cent of the children will be cured with chemotherapy, which is drugs by mouth or by injections.

"The brain therapy is more complicated and involves brain surgery, chemotherapy and often radiation treatment," Dr Kellie said.

And radiation treatment of children is a problem as it can affect development, he added.

"When we give radiation to adults, there is no effect because our brain has stopped growing, but if you have a brain that is still growing in a small child and you give radiation treatment then while you might kill the tumour, you also damage the surrounding healthy brain. And so there is a very important effect from radiation we see in children especially in small children compared to, say, people who are our age," Dr Kellie explained.

"Thus, the quality of cure is very important as many children with brain tumours can suffer problems with their movements, intellect or ability to live independently.

"That's why we are very interested in developing the facilities to improve the quality of life of the survivors and this is where the physical environment, the educational environment and the access to psychological services becomes very important and also access to vocational services to help people train for a life in the workforce and the community so that part of the environment is very important as part of the overall treatment process," he said.

On the reason for the many cases of childhood cancer despite advances in technology and treatments, Dr Kellie said, "There are no ways to prevent childhood cancer".

But it is different for adults in which the cancer risks are influenced by their lifestyle or environment – including what they eat, what they smoke, the drugs they take and sexually transmitted diseases, he said.

"So we can decrease the rate of cancer in adults such as bowel cancer, lung cancer, skin cancer, kidney cancer, liver cancer and hepatitis.

"We can't do that in children. We have children born with cancer. Cancer in children cannot be prevented but can be treated and the opposite happens in adults.



Dr Stewart Kellie

"The cure rates in adults are poor but there are good prospects for prevention like we can decrease the rate of liver cancer by decreasing the rate of hepatitis B transmission

Dr Kellie also said it was much easier to cure childhood cancer than cancer in adults.

He explained that this was because the types of cancers that develop in children are different from the types of cancers that develop in adults.

"Adult cancers happen where we meet the environment. So whether it is the skin, bowel, lung, genetic tract, it is where the environment that meets your body, that's where the adults get their cancers.

"Adult cancers involve internal or external surfaces. Children are completely different. So children and adults are in completely different world with cancers," he said.

Dr Kellie, who is also the chairman of the ISPNO symposium, said it is a biennial meeting that started in 1986 and most of the previous meetings had been held either in Western Europe or the United States except for three meetings that were held in Japan.

"The meeting in Singapore is the first time in the world other than Japan, the Western Europe or the United States," he said, adding that it pulled together all the people involved in the treatment of brain tumours, those involved in rehabilitation, nutrition, hormone and radiation treatment, and others involved in research, laboratory researchers and university people, neurosurgeons, paediatric oncologists and nurses.

"This huge and diverse group has one focus and that is to improve survival and quality of survival of children with brain tumours.

"We are a global community and that is why we rotate around the globe and part of our role in coming to Singapore is to engage with people, doctors and specialists who would not have the funding to go a longer distance so we brought the meeting to Asia rather than expecting people from Asia to go to the rest of the world," he said.

Dr Kellie said the meeting was held in Singapore because Singapore has the reputation as being a hub for medical care and medical education.

"We have 250 people from Asia at this meeting, which is a phenomenal result including 20 nations which are middle income on the World Bank criteria. We also have 93 Singaporean delegates so the local community is benefiting and the regional community is also benefiting and all our key stakeholders from US and Europe are here as well." he said.

Dr Kellie said the meeting was very successful with 22 participants being awarded fully funded travelling scholarships.

"The criteria for getting a travelling scholarship are that they have to show how they could take this knowledge back to their own country, they have to be involved in pediatric neuro-oncology, and they have to not live in high income country.

"We had about 80 applicants and we finally selected 22 and again as a way of reaching out using Singapore as the hub to reach out to the region and to get people in," he said

"Because we believe that for medical education, this is the first step to healthcare. You can have a lot of money, and you can have lots of machines and equipment, but if you don't educate your specialist workforce, you can't deliver sophisticated medicine.

"So we believe very passionately in education. And Singapore was the natural place for me to host the meeting because of the location of Singapore and its existing role as a centre for medical care and medical education," Dr Kellie said.

The ISPNO symposium, held from June 28 to July 2, showcased the leading international advances in basic, translational

and clinical research and also recent advances in addressing the global burden of pediatric central nervous system (CNS) tumours

It was held in conjunction with the 8th St Jude-VIVA forum on June 26-29. The St Jude-VIVA Forum in Paediatric Oncology held in Singapore annually is the combined effort of the St Jude International Outreach Programme of the St. Jude Children's Research Hospital in Memphis, Tennessee, USA and VIVA Foundation for Children with Cancer.

The St. Jude International Outreach Programme's mission is to improve the survival rate of children with cancer and other catastrophic diseases worldwide, through the sharing of knowledge, technology and organizational skills.

VIVA Foundation is a Singapore-based charity with the goal to improve the survival rate and cure of children with cancer in Singapore and the region, through excellence in medical care, research and education.

The symposium was preceded by a pre-forum workshop on June 26-27 with the theme "Improving Childhood Cancer Treatment by International Co-operation". It was dedicated to regional delegates from developing countries and covered topics such as the treatment and outcomes of solid tumours and leukemia as well as updates on participating centres and their research projects.

This was followed by an ISPNO-CCF Learning Xchange which provided an opportunity for parents to connect with oncology experts and other parents with similar backgrounds. CCF (Children's Cancer Foundation) is a non-profit organization with a mission to improve the quality of life of children with cancer and their families through enhancing their emotional, social and medical well-being. – SYC

