he user/client. Of course safety factors must be integrated design considerations and based on a knowledge of child nt and play behaviour. The planning of designated play space based on a good understanding and knowledge of the following

cteristics of the community
development factors and play behaviour
n principles for play areas
election consideration
d and community participation in all phases.

y the Regional Council provides a wide range of facilities as follows: (shown by slides)

ches
mming Pool
sure Pool
door Recreation Centre
nnis Centre
ass Pitches
ard surface pitches for mini-soccer, volleyball and basketball
entral/Town Park
thletic Ground
tadium
Sitting-out area and children playground

in some districts, depending on the suitabilities of venues, the ional Council also provides Holiday Camps and Water Sports Centres.

r all existing facilities, RC maintains a routine maintenance edule with resources to ameliorate play equipment and/or replace orn out ones with new equipment to catch up with the trend as well as ensure a higher standard of public safety at play. Let us look at me of the slides demonstrating our efforts in this aspect:

) **Look-out tower at beaches**

i) This picture shows an old-type of look-out tower made of wood. It has no cover at top, and a viewing platform about 2.25m high. It cannot prevent sun-glaring, and provide a better view for L/G to keep surveillance for bathers.

activated with short notice. Precious time is often lost in consultation and waiting for investigations.

Further back in the chain, our prehospital care is also not ideal. There is too little medical input in the training of ambulance staff. Our ambulance staff is only equivalent to what is called Basic EMT in the States with no capability of providing Advanced Life Support. Likewise, training of other first responders e.g. fire service, police is inadequate. Bystander first aid is also uncommonly practised in Hong Kong. The access to ambulance service is easy though the response time could still be improved.

From the above discussion it seems that every ring in the chain of care need to be improved to give a better result. So, what are the solutions then?

WHAT ARE THE SOLUTIONS

What are the factors that would lead to excellent care so much so that patients who seem to be doomed could be salvaged. A confidential inquiry in UK has pointed to the following features:

"Factors common to unexpected survival were rapid direct transfer from the scene of the accident to hospital, resuscitation under direct consultant supervision on arrival, rapid exclusion of intracerebral damage by CT scanning, early definitive surgery and meticulous care in an Intensive Care Unit." (Clark, 1990)

Where can we find such facilities? The American has advocated specialized trauma centres with well organized regional EMS network. Evidence of success is coming from Germany. Trauma care is very advanced and organized in Germany from prehospital to hospital treatment. Ninety percent of Germans are within 15 minutes from a designated trauma centre. Mortality rate has dropped since such system was set up in 1970. (Clark, 1990; Trunkey, 1990)

United Kingdom is also moving towards organizing trauma care by designating district trauma centres. The Royal College of Surgeons working party has recommended the setting up of one major trauma centre for 2 million population. Within these centres, a trauma team made up of emergency doctor, anaesthetist, general surgeon and orthopaedic surgeon should be immediately available for the reception

of critically injured patients. (Templeton, 1990) Others have argued that free standing trauma centre was not feasible in UK at the moment. A compromise is to have 24 hour senior cover at Accident & Emergency Departments to mobilize the correct trauma team for the severely injured patient. (Rutherford, 1990) For Hong Kong, this seems to be a feasible solution at least for the short run.

Obviously, at the moment we do not have all the resources we want to create enough paediatric trauma centres within our present hospital system let alone setting up free standing trauma centres. Simon (1988) suggested the following measures to compensate for suboptimal resources allocated to paediatric emergencies:

1. Recognition of problem by self-assessment

2. Maximizing availability of key resources

3. Protocols as education and QA tool

4. Interhospital transfer

5. Paediatric Emergency Care Hotlines

6. In-service Education/Quality Assurance Evaluation

We should start by looking inwards and identify some hospitals which are better equipped to receive multiply injured children. Key resources should then be identified e.g. paediatric surgeons, anaesthetists etc. and place them at strategic areas. A designated trauma team should be organized within these centres so that they could respond immediately to receive the child at the Emergency Department.

Experts in the team should help in the formulation of protocols and education of junior staff especially in non designated hospitals. Protocols e.g. those adopted by ATLS course is very useful in producing consistent performance. Interhospital transfer mechanism should be well established so that severely traumatized children could be safely transferred to specialized centre.

TRIAGE AND PREHOSPITAL CARE

In order for the designated trauma centre to function properly, there

must be an accurate method to select major trauma patients to be transported the designated hospitals. Sydney has recently set up a regional trauma system and has developed her own trauma Triage Tool to help ambulance staff to select cases to be sent directly to trauma centre bypassing the nearest hospital. (O'Connell, 1992) In the New South Wales system, paediatric trauma centres are independent from adult centres (with some overlap) and are overseen by a separate Paediatric Trauma Services Committee. (Dept. of Health, NSW 1988).

One of the most commonly used triage tool is the trauma score system. In paediatric trauma the most useful system is the Paediatric Trauma Score as advocated by Tepas (1988).

There is also an urgent need for more medical input in the training of ambulance staff to make them better equip to triage and provide more advanced support to these critical patients.

QUALITY ASSURANCE, EDUCATION AND RESEARCH

Organizing a trauma system is a very complex matter and some form of quality audit is important to maintain and improve standard. (American College of Emergency Physician, 1992) Both prehospital and hospital phase of the system will need to be monitored. Trauma scores is a useful tool in the audit of trauma care for it makes comparison between district and centres more meaningful. (Smith, Ward, Smith, 1990) Quality assurance studies could also be a starting point to find out what is happening now. Very often, people become converted to the idea of specialized trauma centres after the true picture of inadequate care is demonstrated by the audit process.

As in any branch of medicine, research is necessary to enhance our understanding of the disease. Research could also help us develop a strategy that is most suitable to the local situation. At present, research into this area is grossly inadequate.

Trauma education for both the public and the health care provider should also be enhanced as this is a very worthwhile investment.

CONCLUSIONS

Prevention is no doubt the best strategy for trauma care in any age

group. Secondary prevention to decrease morbidity and mortality will require better organization and performance in the chain of care from the scene to the hospital.

Ambulance staff and first responder training should be improved in hc prehospital phase. A triage system should be set up to direct critical cases to designated hospitals which could provide better care. These regional paediatric trauma centres should be organized and equipped to provide timely definitive care to the victim in the vital first hour. Protocols and transfer arrangements should help non-designated hospitals to stabilise patient and expedite transfer of patients for definitive care.

Finally, resources must also be allocated for education, research and quality audit in trauma care. Epidemiological study should be a good starting point.

Given the potential economic loss to the society of such young deaths, I believe there is a good argument to invest in their prevention.

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INJURY PREVENTION IN CHILDHOOD
GENERAL SAFETY

DR. C.C. LUK
Senior Planning Manager
(Professional Development)
Hospital Authority

Injury and poisoning is amongst the major problems facing the children in Hong Kong. The Chairman has just mentioned that it has been the number killer for the 1-14 age group in Hong Kong for many years. Let me also give you some more statistics in relation to the 0-14 age group to illustrate its importance. In 1990, it had resulted in a working year loss of about 3900 years. In 1991, 13% of in-patients treated in Prince of Wales Hospital, Princess Margaret Hospital, Queen Elizabeth Hospital and Queen Mary Hospital, the 4 biggest hospitals in the territory, were admitted as a result of injury and poisoning. Similarly, it has constituted 9% of bed-days occupied in the 4 hospitals in the same year. It is no doubt that all these and other statistical information points to the very fact that injury and poisoning is a major health and social issue for children in Hong Kong. This is especially so as most, if not all, of these accidents should in theory be preventable. The need for better concerted efforts to provide a safer environment for our children is eminent. In this regard, I am sure that Hospital Authority has a important role to play in many areas. As far as my presentation is concerned, however, the focus will only be on the development of an information system as the backbone to support and facilitate injury prevention in childhood.

The need for having a good database on accidents in childhood is one of the most important pre-requisites in the planning and implementation of policies and measures to prevent childhood injury. In this regard, Hospital Authority (HA) will definitely play a critical role as majority of the injured children, especially the severely injured ones, will be managed in the public hospital system.

I will try to outline herewith the existing practices and planned development under Hospital Authority on how we can contribute to the establishment of this database. I will focus on the following 4 areas which are of particular relevance :

1. Computerised In-patient Information System

The system currently in operation is the Computerized Hospital In-patient Statistics System (CHISS). This system was first developed in 1974 and currently covers 8 public hospitals, namely Kowloon Hospital, Princess of Wales Hospital, Princess Margaret Hospital, Queen Elizabeth Hospital, Queen Mary Hospital, Tang Shiu Kin Hospital, Tsan Yuk Hospital and Tuen Mun Hospital. It can immediately be seen that one major drawback of this system is inadequate coverage as it does not include information pertaining to the other 28 HA hospitals. In addition, as the system was developed more than 15 years ago, it is not unexpected to learn that it can only allow generation of limited dimensions of statistical information.

Thirdly, as we have to rely on Information Technology Services Department and Census and Statistics Department to provide data processing support for this system, there is a relatively long lag time for generation of statistical information. There is obviously much room for improvement and the development of the Integrated Patient Administration system (IPAS) will be an important step forward.

IPAS is basically one of the operational information systems of HA covering databases on patients, staff and finance. I will not go any more into the technical details of the system as the main theme of today's seminar is not on information technology. Our current schedule is to have phased introduction of the system starting in 1993 with the ultimate aim of extending the coverage to all HA hospitals. The built-in flexibility of the system will allow generation of statistical information in various formats, many of which are not possible with CHISS. Furthermore, we will be able to retrieve information from IPAS without much time lag as the operation of this system no longer depends on the support from other Government departments. It can thus be seen that we look forward to having more comprehensive and timely information with IPAS.

2. Disease Coding

The disease coding/classification systems also merit some discussion. This is important because it is the disease coding/classification system that determines how much clinical details can be obtained from the information system. Such details may range from the cause and site of injury to the clinical impact of the injury on the child. As far as our objective of facilitating injury prevention in childhood is concerned, it is definitely desirable to have as detailed information as we can. Improvement in this aspect will be forthcoming as we will be using International Classification of Diseases, 9th Revision-Clinical Modification (ICD9CM) to replace the currently used 9th Revision of the International Classification of Diseases (ICD9). As far as our discussion here is concerned, I will not bother you with any details on the 2 classification systems. I merely wish to point out that ICD9CM is more specific and detailed than ICD9 and will allow us to have more detailed and meaningful information about accidents leading to admissions into HA hospitals. Introduction of ICD9CM is also on the pipeline and will be piloted in 1993.

3. Clinical Information System at the Accident & Emergency Departments

Although there is no readily available statistics, it appears reasonable to assume that most of the injured children who require medical treatment will go to Accident & Emergency Departments (AEDS) within the public hospital system. Some of them, however, do not require admission and can go back home after receiving the treatment given at AEDs. The aforesaid developments in information system, essentially tailor-made for in-patients, will therefore have no bearing on this group of injured children.

We are fully aware of the need to have good databases at AEDs for various purposes, one of which is to provide the basic information for formulation of policies and subsequent planning for preventing injury in childhood. At present, the only relevant information we have is just a broad classification of AED patients into traumatic and non-traumatic groups. There is even no further breakdown by age group ie we are unable to provide information like "the number of children attending AEDs for traumatic reasons". It is our plan that a proper clinical information system should be developed in

all HA AEDs. This system should, inter alia, serve as a database on childhood injury cases seen in AEDs to provide relevant information like the cause, nature and severity of the injury etc. This can then supplement the in-patient information system to provide a more comprehensive and realistic picture of all injured children receiving medical treatment in the public hospital system. According to our current working schedule, we will embark on the development of this clinical information system next year.

4. Co-ordinating mechanism on collection and utilisation of Information

The above account only covers the developments within HA. I feel that it is also critically important to improve the interfacing between the Government, HA and any other relevant organisations. In this regard, I would describe the current practices as ad hoc and reactive. Access to information on childhood injury is not guaranteed and even if affirmative the information will only be released upon request. There is no regular or structured mechanisms to allow mutual sharing of information. There is neither any formal mechanisms to co-ordinate the compilation, analysis and utilisation of information which, though limited, can still be obtained from the Government and various public bodies. We strongly support the Chairman's proposal that a good co-ordinating mechanism should be established. It is absolutely essentially that this mechanism should be structured and pro-active and will allow all relevant Government departments and public bodies receiving automatically and having direct access to all the relevant information on childhood injury. It is also vital to assure that this co-ordinating mechanism can facilitate the actual utilisation of these information leading to relevant policy formulation, subsequent planning as well as implementation of necessary actions.

Summary

It is no doubt that having good database is one of the essential pre-requisites for tackling the important issue of preventing childhood injury. The future developments on informations systems under Hospital Authority will allow availability of more detailed, comprehensive, accurate and timely information on injured children seeking treatment in the public hospital system. However, it is equally, if not more, important that a structured and pro-active mechanism should be established to co-ordinate between the Government, relevant public bodies and community organisations on the collection, compilation, analysis as well utilisation of relevant information on childhood injury. The ultimate objective is to support and facilitate appropriate planning and policy formulation on how we can solicit concerted efforts to provide a safer environment to our children as far as possible.

CHILD INJURY PREVENTION

DR. THE HON. LEONG CHE HUNG
Legislative Councillor

Legislation is not the solution for all ills. Law helps, but does not solve problems. The better course, as has been echoed repeatedly, is prevention.

In the case of child injury this entails,

*** Identifying the causes of injury**
*** Educate the public**
*** Set statutory quality control on products.**

A legislator can improve the situation by firstly persuading the government into treating child injury prevention an important issue, one that deserves more money and more resources to tackle the problem.

Secondly by pressurizing the government into setting up a Child Safety Council, which should be a publicly funded statutory body that oversee and co-ordinate matters on child injury.

Finally in the unfortunate event that a child is injured, I wish to see extended rehabilitative service and counselling provided to help the injured child regain a normal life.

DISCUSSION ON GENERAL SAFETY WORKSHOP

Chairperson : Dr. Chow Chun Bong
Reporter : Dr. So Kwan Tong

DISCUSSION AFTER MS LEUNG'S PRESENTATION

Floor :
You mentioned that there is a proposed arrangement to prohibit child abusers from becoming child minders. I think this is a sensible approach but I expect some technical difficulties. What is the level of proof required ?

Ms. Elsie Leung :
Actually, conviction is required. This measure is going to be of limited usefulness because anyone applying to be registered as a child minder is not obliged to agree to have his/her name searched against the list of convicted child abusers.

Floor :
In many of our paediatric wards, children are sometimes left unattended for short periods of time and then sometimes children fall out of bed. What do you think about it from the legislative point of view ?

Ms. Elsie Leung :
Provided that the hospital has taken enough preventive measures to avoid children falling out of bed e.g. using restrainers etc., then the hospital has no liability.

Floor :
You mentioned the proposed legislature to prevent child minder with contagious disease from looking after children. What about mothers with contagious disease and decide to continue to provide the care to their children ?

Ms. Elsie Leung :
The mothers in these situations should ideally have their children cared by foster care, institutional care or other services.

DISCUSSION AFTER DR. PETER'S PRESENTATION

Floor :
You mentioned about the rising number of smokers among our children in Hong Kong. Is it a global problem or something unique in Hong Kong ?

Dr. Jean Peters :
It is a global problem.

Floor :
Do you have any information about the effect of second hand smoking on the fetus ?

Dr. Jean Peters :
[recording too low in level to be interpreted].

DISCUSSION AFTER MR. LOK'S PRESENTATION

Floor :
How many hours of training do you offer to your Auxiliary Medical Service Staff ?

Mr. Lok Cham Choi :
Forty hours of intensive training is being given to each AMS staff and this comes after they have received the basic first aid training.

Dr. Chow :
I see that there is a need to empower the parents so that they can have the necessary skill and knowledge to looking after their injured child.

Floor :
At the school, there is usually only one teacher trained to provide first aid to the injured child, and I worry about the coverage when this trained staff is away from the school e.g. taking leave etc.

Floor :
In fact, a survey has shown that 40% of the school teachers indicated that they would like to receive first aid training. However, only the female trainee will receive first aid training.

Floor :
How should we train up the child minders and amahs who really spend a lot of time with the children?

Mr. Lok Cham Choi :
The AMS can actually organise training to this target group and I think probably priority should be given to full time child minders first and then the service can be extended to cover other target groups.

Mr. Lok Cham Choi :
While teaching first aid to new recruits and new target groups is important, the need for continuous education should not be forgotten. Re-training is required from time to time to ensure that optimal care will be provided when they are needed.

DISCUSSION AFTER DR. WONG PRESENTATION

Floor :
What is the percentage of abuse at the accident and emergency department ?

Dr. Wong Tai Wai :
Nowadays we do not talk about abuse of the A&E service because it is difficult to define.

Floor :
What is the number of non-emergency cases then?

Dr. Wong Tai Wai :
Well, I consider abuse as intentional misuse of the service. But the intentional part is difficult to proof. Hence in my dictionary there is no such word as abuse but there is misuse. We actually let the patients decide whether a particular situation is an emergency or not. A worried mother with her kid running a fever of 39 degree C or above may well be an emergency if it occurs at 1:00 a.m. when there is no G.P. around.

There is no time for discussion after the presentations by Dr. Luk and Dr. Leong.

PROPOSALS FOR GENERAL SAFETY (G1 to G14)

G1 Hong Kong should ratify the Convention on the Rights of the Child.

G2 That Hong Kong should establish childhood injury prevention a priority goal and child safety be given prime consideration in any policy involving children.

G3 That a statutory body Child Safety Council should be set up to steer and coordinate all activities related to childhood injury prevention.

G4 Children have the right to be reared in safe, healthy and enjoyable environment and also these they must be provided with.

G5 Injury prevention should be recognised as public health issue with high priority and adequate resources be allocated for research and action.

G6 A Childhood Injury Information System should be set up to collect and generate accurate information on childhood injuries; interpret and analyse these information to identify problems, hazards, risk groups and injury-producing behaviours; and disseminate the information to relevant authorities and agencies for appropriate action.

G7 Health professionals should contribute towards and support safety and environmental schemes by providing expertise, communicating the problem and providing education to public and training of professionals.

G8 Basic essential first-aid techniques should be learnt by all parents and those personnel who are required to look after children and first-aid topics should be included in the school curriculum.

G9 Efficient and effective paediatric trauma care system should be established with provision for education, research and quality audit.

DEPARTMENT OF HEALTH AND HOSPITAL AUTHORITY

G10 For injured children, they should be provided with good rehabilitative care.

G12 That more supporting service be provided for childcare.

G13 That the standard of child care be improved and implemented through legislative measures, having regard to local resources available at the material time.

G14 That legislation should be enacted to prohibit children from being left unattended at home without taking necessary safety measures to prevent injury to them.

* * *

REPORTS AND DISCUSSIONS OF THE FOUR WORKSHOPS

Chairperson : Dr. Chan Chok Wan
Panelist : Dr. Chow Chun Bong
: Dr. Henrietta Man Hing Ip
: Dr. The Hon. Leong Che Hung

Mr. Chairman's opening speech :
This morning we have had four workshops taking place together. These workshops usually have very nice discussions and very nice findings, but unfortunately we are unable to attend all of them. That is the purpose for having this general discussion and we can try to get together the ideas. The way that I will run this general discussion is like this: First of all I would like to invite each of the Chairman of the workshops to report on their workshops, to make proposals, and then we will leave some time for discussion. At the end we will adopt the relevant proposals. I will do one workshop after the other. If this is agreeable to everyone, we will start.

THE FIRST WORKSHOP ON HOME SAFETY

Dr. Patricia Ip was invited to give the report :
Our discussion was on home safety. This morning we had a group of expert speakers and very active participation from the audience. The feeling was that there has been a lot of departments both government and non-government who are doing a lot of work for home safety. But what we need is to have a central body with a central policy and childhood injury prevention which needs good surveillance to guide us and also evaluate our work.

The different areas we have looked into include the physical environment of a home, whether public, private or temporary and their

guidelines as to safety measures in different areas within the home and also outside the home as regards the design. They include the gas and medical supplies. This does not mean just the design and standard, we need to monitor these safety measures after the flats are occupied. It is important to have users' feedback as this shows whether or not it is a safe and of a convenient design. For example, if we are worried about people plugging too many plugs in the electric sockets when in fact, there are enough sockets in the house.

Another area is the furniture inside the home, especially the object beside clips and bunk beds and also the furniture which are not intended for children.

When people are buying furniture, they need to have a check list so that they know what features they are looking for apart from the appearance of the furniture.

The next area is drugs and poisons. Although this is not the major cause of mortality for children, it is a cause of morbidity. However, we don't have enough information on how bad the morbidity is.

The recommendations include various safety measures of keeping drugs and potentially poisonous drugs at home.

I think we have already have a Poison Centre in Hong Kong but access is for professionals not the public. If it is for the public as well, the Poison Centre would be more useful.

Another area is toys and children's products. There are toy legislation in the pipe line. We hope it will soon be implemented. We have talked about the warnings on toys. We have written down some recommendations. The warning is for people who are actually buying them. In Hong Kong, we use both English and Chinese. A check list of safe toys is very useful.

Another is fire and burns. What has been brought out was that people have to be fire conscious. In every aspect within the home, we should look into the potential danger of fire hazards. Education of parents and children is very important in order to avoid fire and burns which is a major problem in rooms, kitchens and on the dining tables in Hong Kong.

The public should be educated and motivated to change their behaviour. In order to avoid childhood injuries, action is on the prevention. The role model of professional is very important. Knowledge of First Aid for schools, children, parents, health care workers and the public is very important.

We should promote the recognition of adolescent depression, postpartum depression, signs of non-accidental injuries and teach children discipline. Although our seminar today is not actually on non-accidental injuries, some injuries we face are non-accidental.

We have mentioned over and over again that parental supervision can not be replaced by safety measures alone. Children should not be left unattended. On the other hand, the presence of parents and guardians at home is not enough to ensure home safety.

We hope the media will place more emphasis on how to prevent accidents instead of blaming the victims. Attention should be paid to advertisements and behaviour of heroes on the screen. Attempts should be made through both the government and non-governmental channels to maximize the propaganda effect.

Last but not least is that attention should be paid on morbidity and long-term consequences on the children and not just mortality.

The Chairman then encouraged open discussion from the audience on the proposals. He invited the opinions and comments about these proposals. THE PROPOSALS WERE ADOPTED AS THERE WERE NO OBJECTIONS.

THE SECOND WORKSHOP ON ROAD SAFETY

Dr. Michael Mong was invited to give the report :
Ladies and Gentlemen, this morning we have heard very distinguished speakers representing various government departments, including the Royal Hong Kong Police Force, the Transport Department and some other voluntary agencies, i.e., the Road Safety Association, the Hong Kong Automobile Association as well as the Institute of Advanced Motorists of Hong Kong. We have heard some constructive suggestions and views as depicted by various speakers. It is my duty here to consolidate all those views and to present to you our suggestions and recommendations to be endorsed and approved by this General Committee.

As an introduction, we have tabled in the workshop, the number of road accidents. Although they are alarming, statistically the number has decreased in the last decade, some substantially to over 40%. In fact, theoretically, our roads are now safe but we are not contented with that. We are in fact heading for the idealistic world of perfection in which we see no accidents on roads. Although it is something of a fantasy, we are still heading in the right direction. We have the following numbers and proposals which I will throw to the floor for open discussion to see whether or not they can be accepted or endorsed by you.

Proposal No. 1 :
There should be a compulsory requirement for children travelling in the rear seats to wear the approved seat-belts or restraining devices. This is in line with the present requirement for a forward facing front seat. It has not been brought to attention but it was erroneous for some of you to think that it was unnecessary to use seat-belts for short journeys, say, travelling within a town. But experimentally, I have to re-assure you that the momentum inherited in the moving body is quite substantial.

Perhaps one is not talking about mortality which is causing fatal damages but is really morbidity that causes damages. For example a young girl that could have been disfigured due to being crushed against the wind-screen, or permanently blinded due to eye injuries. It is something we are all after to prevent. One shouldn't be thinking that he is travelling a short journey and there is much time for traffic jams, therefore there should not be any opportunity for wearing seat-belts. But the argument is that had anyone been wearing a seat-belt, the chance of being restrained onto the seat will guarantee safety and there shouldn't be any residual damages even for short journeys. Of course, it will take a long time for the government to adopt such a legislation requirement and to be put forward to Legco but still, the consensus of our workshop is to propose and suggest to the authorities the compulsory requirements.

Proposal 2 :
It was suggested that all private school buses should have suitable child fitted restraints. It has been observed that although the overall number of casualties for private school buses is 3% of the overall casualty figure, it has been rightly pointed out that one should be talking about private school buses in general. Although it may not be substantial in the figure itself, the requirement for such

buses to be fitted with child restraints will go a long way in reducing the child from leaving the seat and also it will be fastened to the seat in case of a frontal accident or collision.

Proposal 3 :
It was proposed to include into the Road Users' Code, advice for the child under five-years old not to be allowed out on roads. It is a code of practice but is not the law. It is strongly advised that parents should not allow their children to go unattended if they are under five. This is at the risk of some children who suddenly dash out. In order to prevent such unavoidable action, parents and adults who are walking with young children should always accompany them and walk between them and the traffic as human barriers. They should keep holding the children's hands. If it is impossible to do this, they should resort to the use of rings or other devices to secure the child firmly to the push-chair. Children should not be permitted to run onto the roads. Ball games on pavements are discouraged whenever they are next to the roads so as to prevent children who chase the balls from running into the traffic.

Proposal 4 :
It has been suggested that children under the age of 16 are not allowed to ride bicycles on public roads irrespective whether or not they are accompanied by adults. There is practical difficulty in making it into law. Are we depriving children of such activity as cycling is an athletic game. Simultaneously, we proposed that all cycling paths should be designed to counter balance the effect of offering an opportunity for children to properly enjoy their time cycling.

More centres should be set up to teach children to cycle properly so as to reduce the risks of bicycle accidents, sports injuries or confrontation with on-coming traffic, etc.

Proposal 5 :
All schools are strongly urged to support road safety education. It has been shown that the peak hour for traffic accidents to school children is during the dispersion time, either noon-time or after school. Children should be brought up in this environment. This has to go in conjunction with various departments who are doing their jobs willingly, like the HK Police Force and also the TD for better road design and other voluntary agencies which contribute to road safety .

Active participation of schools is encouraged to educate and monitor their children in pedestrian crossing nearby their schools. It has been proudly claimed by the Road Safety Association that over the last 29 years of their existence, no road accident was recorded at the crossing patrolled by the Road Safety Unit. Although only 50% of the schools have set up road safety petrol unit, it has been felt that such messages should be spread across. The Education Department should give a helping hand in "influencing" schools to set up road safety units. Regards to future design of roads or legislative control of safety devices, proper database is required. To this end, it has been proposed that it would be better to keep a record of the details of child injuries, the patterns and the distribution upon their referrals to hospitals so that analysis can be made for better road design and legislation.

Proposal 6 :
It has been suggested that curriculum at present for learner drivers is inadequate. For example, the lack of expressway driving and training. The Transport Department should review their requirement for the sitting and the passing of driving tests and incorporate training in various road conditions as part of the curriculum.

The permanent means of separating vehicular traffic from that of pedestrians is the ideal way of preventing accidents. More appropriate crash barriers at traffic black spots should be installed to separate pedestrians from the vehicular traffic.

There should be consideration for adding more facilities to road crossing. For example, elevator walkaways. Now it is difficult for push-chairs and wooden carts to go across the flyover. The installation of sophisticated technological equipment such as lifts for heavy goods.

Road safety towns have successfully demonstrated the correct way of road crossing for children. Suggestions have been made to demonstrate how a dummy would have been hit. Perhaps, some devices could be installed so that we would feel more secure in our seats with safety belts properly applied.

It has been agreed by the Royal HK Police Force to give priority to enforcement control of pedestrians not using the road crossing facilities, such as the walk-ways, tunnel subways, or not obeying the green man signal. This is a form of education.

At present, offenders who do not use road facilities properly do not get prison sentences. However it has been felt that heavier penalty within the legitimate level should be given to those offenders by our courts.

The last proposal :
Whether or not we should have more media coverage and follow-up reporting of victims of morbidity and also mortality (those who are killed as a result of road accident). The public should have first-hand information as to what would happen to them if they had been injured at a traffic accident. This would provoke them into paying more attention when crossing the roads. Adults should set good examples for their kids to follow.

The proposals were open for discussion :

Mr. Nigel King, Dentist :
The last recommendation here was a higher level of competence for driving licences which implies that adults' driving vehicles are dangerous. The implications are that by the age of 16, the child is capable of riding a bicycle in the same place as the motorist. Would it not be better for the child to have passed a test of proficiency before they are allowed to go onto the roads ?

Dr. Ip :
In fact, it is something very near and dear to my heart. I was hoping somebody would start talking about this subject. I personally feel that children under 16 should not be allowed to ride on a public road unless they pass the test. There should be some schemes whereby children are allowed to learn to ride a bicycle and be given a proficiency test. I know in England they have the bicycle riding proficiency test for children. I hope the general discussion on the floor here could overturn the workshop's counter proposal of discouraging children under 16 to ride a bicycle on public roads but make it a criteria, either they have to pass a test or they shouldn't be allowed on the roads at all.

Mr. T Cheung, an Architect of the Housing Department :
I also have something to say concerning the recommendations on R3 and R4 which I think by itself is contradictory. Having said that children under 16 should not be allowed to ride bicycle on the sidewalk or along the public roads, but at the same time you were suggesting to create more arena paths. It seems that the children are

to ride their bicycles on these paths and then create more accidents on roads. From our experience from the Housing Department, we are trying to internalise all these bicycle activities inside the towns on the pedestrian crescent rather than a traffic free environment. I think that the transport engineer and urban planners may think about taking the case of Holland, they are creating some areas where the main traffic is diverted from the living environment. From this point of view, you can create more of that sort of traffic free environment. It is not a matter of not asking people not to ride in bicycles but is rather a planning issue. There is a chance that we can do more on that when we build our airport town.

Dr. Mong :
I think the recommendation which discourages the cyclists from riding bicycles on public roads has practical difficulty. If you make it the law, there will be difficulties in defining what will be a public road to start with, and what will have happened to the paddle cyclists from home to the arena paths, for example. Our panel looked at it from the practical aspect so we only came out with the consensus that at best, we can only discourage paddle cyclists from under 16 unaccompanied by adults, not to ride on public road. Of course, the recommendation has to be read in conjunction with the subsequent two recommendations.

Dr. S K Chau, surgeon :
Concerning the second recommendation on the draft about under five-years of age, I don't know how you come to this magic figure. I have two boys, the elder seven and the younger five. I worry very much when they are out by themselves. I don't think seven-years of age is old enough to be allowed out on the road. I feel that they should be at least eight or even nine-years old before they should be allowed out by themselves. I wonder if parents from the audience would agree with me. I hope you can raise the age limit.

Mr. M B Leung, Education Department :
The Primary 1 pupils are now six-years old. Very often, they have to go to school alone. If you raise the age limit to above six, say, eight, that means every child has to be accompanied by his or her parents. I don't think it is a good figure.

Dr. Mong :
We have to be practical to start with. I welcome any suggestion other than five-years-old. The line has to be really taken into consideration about the legal requirement.

Dr. Ip :
I think five-years-old is a reasonable age, not to say that six or seven-year-old children should be allowed out to walk unattended or encouraged to do so. I think we have to distinguish between the kindergarten and the primary school children. The former one should always be accompanied to schools. Therefore I would keep the age of five as the starting point.

Dr. S K Chau :
I think we have to differentiate between something practical and something desirable. Leaving children at home unattended is undesirable but not practical. We need to propose something which can be enforced and is desirable. That's why I want to raise the age limit.

Nine votes were counted in favour of nine-year-old.

Nineteen votes were in favour of five-year-old.

Mrs. Mei Ng, the Hong Kong Childhealth Foundation :
I think roads in Hong Kong are getting more and more of a safety hazard and health hazard, I am referring to the road repair works. Children's respiration is thus affected. I wish various departments would come together for better co-ordination of road repair works. If possible, send out early notice to schools in that area to notify them certain roads will be repaired, warn the parents who use these sections of the roads.

Mr. Tony Mullins, the Deputy Director of Traffic :
As far as notifications are concerned, this is done by ourselves as well as the Transport Department. As far as enforcement is concerned, such information are passed to the Police, notifying them of the duration of the road works. At the moment, I agree with you there are numerous road blocks but it is a question of balance taking into account Hong Kong's economy, the repair works and the free movement of traffic. The question of environment is a new one which I haven't actually considered.

Mr. Chairman :
Road works are hazardous and the Government should try to improve road co-ordination for road works and the public should be adequately warned, especially the school children.

Dr. K M Ng :
I have a proposal on the school bus. I think there is no recommendation on the placement of assistants in school buses for kindergarten children. It may be a necessity. Secondly, as witnessed, mini school buses sometimes drive at high speed. Should there be a limit, say, 50 kilometers. As kids cannot help themselves while they are on school buses.

Dr. Mong :
You are proposing two things. One is the requirement of a supervisor present on a school bus. I don't know whether it has been in the legislation that school buses should have supervisors or adults to attend to the children.

Mr. M F Leung :
I am going to read a circular to you concerning information on licensed school buses. When pupils are travelling on these vehicles, arrangement should be made for adults, teachers other than the drivers who know the pupils well to escort them during the journey. So, there is some provisions. It is guidelines but not legislation.

Dr. Ip :
I think it is rather difficult for the Government or the police to enforce this type of cars irrespective of the speed limit. You are only to drive at 50 kilometers while others are allowed to move at different speeds. It would be really confusing. I think it would be easier if we just make sure that the vans that are taking the children to schools are safe. How about those cars that parents drive to send children to schools? Do you limit their driving speed to 50 kilometers? So, I don't agree with that.

One speaker :
In the States, there is an upper speed limit for trucks. The proposal is that the mini school bus' upper speed limit is 50 kilometers. It is also proposed that mini school buses for children should have adult escorts.

18 Votes were counted in favour of the flat speed limit of 50 kilometer for mini school buses for children while 23 votes were against it.

Dr. Ip suggested to leave this topic so that people can talk about it in the future.

ii) This picture shows a concrete look-out tower with covers and view-platform at a height of 3.35m, a standard used by most advanced countries. This provides a better working environme to life guards enhancing public safety swimming at beaches.

b) **Life-saving services**
Formerly, at beaches, the RC provides a catamaran for patr duties, and life-saving services. In order to maintain bett safety measures, RC uses canoes and speed boats as well to provi expeditious and efficient actions in rescuing activities.

c) **Children play area**
This shows that a slide, an old type children play equipment children play area with concrete floor.

This shows a new set of children play equipment with a wide ra of play elements more attractive to children. Safety mattings used as flooring to enhance safety for children at play.

d) **Leisure Pool facilities**
The picture shows that a bridge between the main pool secondary pool. It will become a blind spot for life gua Therefore it is necessary to have some blockage to barric swimmers to play underneath the bridge to ensure life-gu coverage can be made to all swimmers at pool water.

The Regional Council makes continuous efforts in the provision leisure facilities according to the Hong Kong Planning Standard Guidelines, and in the assurance of public safety at play.

In the field of promotion of recreation and sport activities, the organizes over 5000 programmes each year in the Regional Council ranging from sports training courses, recreation fun days competitions. These programmes can be categorized as follows (the aid of a transparency) :

i) Athletics & Aquatic
ii) Dance & Movement
iii) Individual Games
iv) Outdoor Pursuits
v) Special Groups
vi) Team Games
vii) Recreation activities

ll these activities are organized and taught by qualified instructors ho have been trained not only in skills but also in the safety pects of the sport. They all abide by the course content, the rules d regulations on safety measures at play. Take an example in the lementary Swimming Courses". The course content is laid down in nsultation with the National Bodies i.e. the Amateur Swimming ssociation and Swimming Teacher's Association. Let us take a note of is course content with an aid of a transparency).

lso we issue notes to instructors to make clear to them what they hould do to ensure learner's safety at lessons (with an aid of a ransparency); and also notes to participants to bring to attention hat are the 'don't' in attending swimming lessons and in taking part n swimming activities in order to be safe at play.

t's always the wish of the Regional Council to promote fullest ossible leisure facilities and activities to the public for their hysical well-being, with the ethic "Play Safe, Safe Play".

INJURY PREVENTION IN CHILDHOOD SPORTS & SCHOOL SAFETY

MR. LEUNG MAN BUN
Senior Education Officer (Schools)
Education Department

The existing organisation of the Education Department in prevention of accidents to pupils in schools and in sp environments has been made through the following:

a. Provision of brief guides to main requirements concerning planning and design of school buildings - These guides deal regulations and requirements to be observed and met by s sponsors and architects in designing school buildings. One a of these recommendations is to render the premises safe healthy for the conduct of school activities.

b. Statutory requirements under the Education Ordinance - In app for registration of premises as a school, the applica required to meet various requirements provided under the Edu Ordinance.

c. Issues of pamphlets and schools circulars on safety precauti science laboratories and workshops and in conduct of activities.

d. Workshops and seminars on safety in the teaching of p subjects and physical education.

elopment in the promotion of sports and school safety will in the light of any legislative requirements, new knowledge used in the learning processes, and experiences gained by Schools are updated through the issues of circulars and on sports and school safety, and workshops and seminars on l continue to be organised for teachers by the Education t.

has an obligation of care to others and to care for oneself against risks of accidents. The key note of sports and fety is advance planning, adequate supervision by experienced onsible personnel, knowledge of possible potential hazards of ironments, and above all care for others and ourselves when in work or play.

DISCUSSION ON SPORTS AND SCHOOL SAFETY WORKSHOP

Chairperson : **Dr. Chan Kai Ming**
Panelist : **Dr. C.W. Choi**
Dr. York Chow
Dr. David Fang
Dr. Stephen Hsu
Reporter : **Miss Yvonne Yuen**

Dr. Chan Kai Ming :
I would like to propose the following format for the next 2 hours. W will have 4 speakers to present their area of specialty for 15 minut each. We will then have panels invited to discuss.

One of our very important task is to make proper recommendation to t Organizing Committee, to stimulate the discussion, the understandi of childhood injury in the community, and the ultimate goal is to for a council to draw in various experts and resources and to effect lon term planning and actions to our community.

The Government has decided to spend more resources in the educati system. We would like to take this opportunity to ensure that t Government won't lose sight of the importance of physical educati for our children. Productivity of a community is highly dependent o the health of the public. I would like all of us to discuss th subject with a broad prospective on thinking yourself as part of t promoter of the progress of Hong Kong. We will now have presentatio from our speakers.

Presentation by Dr. Chien Ping

Presentation by Ms. Josephine Yeung

Presentation by Mr. Andrew Leung

Presentation by Mr. Leung Man Bun

PANEL DISCUSSION

Dr. David Fang :
We obtained a lot of statistics from Dr. Chien Ping's presentation. Is this data limited to child population?

Dr. Chien Ping :
This data is basically limited to below the age of 12.

Dr. David Fang :
I think you have rightly put the emphasis on the adolescent group when they are psychologically more prepared to excel in sports. Therefore, they are particularly prone to injuries. The epidemiological statistics show that 3/4 of the injuries were minor (i.e. the child can be discharged immediately).

Ms. Josephine Yeung told us the ideal situation at the Hong Kong Sports Institute where there are a lot of instruments which caters for elite athletes. The general public is far from having similar facilities. I wonder how these excellent facilities can be related more to the general public rather than being spent only on the elite .

Mr. Andrew Leung provided a lot of details on a lot of excellent facilities at the Urban and Regional Council. It is very important to relate these facilities to schools. At present, the use of these facilities are more or less on a volunteer basis or group volunteer basis and the schools will use the facilities perhaps once a year for the annual sports day. School children should utilize the facility on a weekly or monthly basis. This is particularly important in a society like Hong Kong in which school children are under immense tension. The facilities will be able to reduce this tension if they are shared in a more effective extent to schools.

Mr. Leung Man Bun told us the pattern of injuries in school and the present safety procedure being practised in school. The Education Department is still not doing enough to assist the schools to improve their own facilities. The facilities and the manpower in the government and government-aided schools are far below those of the international schools. For instance, the toilets are not properly cleaned. If there is not enough resources, why would the Government not allow the schools to raise additional resources.

Concerning the first-aid box, most school still use iodine to treat minor injuries. This practice is obsolete. Instead, we have an antiseptic solution of a mild nature. A modern first-aid box should contain proper dressings such as standard sterilized cotton wool, elastic bandage. The first-aider should learn how to splint. I think some improvement can still be brought about by properly organized training in first-aid and the care of less serious injuries.

Dr. Chan Kai Ming :
Thank you Dr. Fang. Maybe the speakers can respond to some of these comments later on. May I ask Dr. Stephen Hsu to react to the speakers.

Dr. Stephen Hsu :
In terms of prevention of sports injuries, we have to take on a more proactive view instead of a reactive view. We may need to investigate the location statistics of injury in order to understand how a particular environment is related to injuries. Certain sports are not physiological suitable for our children. We should discourage those sports. Although they may achieve gold medals in the Asian Games, it doesn't work for the general population .

The referral system is very important. The teachers or coaches are probably the first ones to see the injuries and he/she would decide whether the child should be sent to hospital or treated on site. Therefore, these people should be properly trained.

Lastly, about the bone-setter. After the injuries, it is common that the child is brought to the bone-setter. It is dangerous to risk the use of herbal medicine and twisting the joint by reduction.

Dr. Chan Kai Ming :
Dr. Choi, would you like to react to some of the speakers?

Dr. C.W. Choi :
I would like to ask Mr. Leung, whether there are any lessons to teach children how to avoid sports injuries. The PE teachers should not only learn first-aid, but also injury prevention, rules and regulations, etc.

According to age and height, children are classified into groups for inter-school competition. This is particularly important for contact sports, like soccer and basketball in which sports injury is mainly caused by the difference in body sizes.

Dr. Chan Kai Ming :
Maybe we can allow the speakers to react very briefly to some of the comments.

Mr. Leung :
Concerning PE teachers, there is first-aid training for them . Every year, the Education Department issues a circular to all schools requesting PE teachers to take part in first-aid training. About resources, we are now advocating that the school management should take the initiative. Schools are given the resource and are allowed to enhance their facilities in various aspects. Nowadays, the toilets in schools are built according to standard design. However, it is up to the head to look after the minor staff so that they can keep the toilets clean at all the times.

Concerning the knowledge of teachers on how to dress up wounds, we do hope that doctors can visit schools from time to time to give talks to teachers concerning the first-aid and other medical advice. Mr. Lau, would you like to say a few words concerning the division of grades on competition.

Mr. Lau (Floor) :
The classification and division of our children for competitions has been a defensible issue among schools. After a lot of experiments and statistics, classification by age is the best method. The difference in body size among a child of a comparable age is not significant these days.

Floor :
First-aid and life-saving certificates are compulsory for all PE teachers. At the same time, sports injury is also included in the training of PE teachers.

Dr. David Fang :
The Hong Kong Medical Association is negotiating with the Education Department to arrange a Hong Kong-wide series of talks directed to both teachers and children on first-aid, life-style, how to cope with anxiety, etc. This may effectively prevent one of the most important accident amongst school children.

Concerning resources, manpower is most limited. At present, we have 1 teacher for every 40 students. The teacher may not be able to give enough individual attention to students.

Dr. Chan Kai Ming :
There is a suggestion to increase the cooperation between the Regional Council and schools in the use of sports facilities. How do you react to that ?

Mr. Andrew Leung :
A new venue is promoted to all schools, local organizations and head of PE teachers through posters, hand-outs, open-days, etc. Schools are encouraged to use the facilities at discount during non-peak hours. Furthermore, good relationships are maintained with various organizations to promote our facilities and activities. All in all, publicity of the facilities and activities have been very extensive.

Dr. Chan Kai Ming :
Are there any statistics showing the proportion of the facilities that are used by schools in an organized way ?

Floor :
It is difficult to have such statistics for Hong Kong as a whole. However, for one of the districts, it is around 40% as some of the schools use the hard-surface playground for PE lessons and all the major inter-school competitions are done in our indoor playground.

Dr. Chan Kai Ming :
Based on these statistics, we should look at the problem in the 2 geographic settings: both in the school ground and in public facilities.

Dr. David Fang :
From time to time, volunteer organizations will organize program for children but not on a regular basis. They should have more organized activities on a regular and fixed basis.

Dr. Chan Kai Ming :
The world recognized guideline for physical activities for a child is one full hour a day. Do our kids have that degree of physical exertion ?

Mr. Leung Man Bun :
In our schools, there are 2 formal PE lessons per week for our children. We have extra-curricular activities which plays a very important role in the life of our school children. There should be enough activities for our school children. The government has proposed to increase manpower to 15 pupils per class and 30 pupils per class which adopts the activity approach.

Dr. David Fang :
The Education Department should pay attention to free time for children. Many children are doing 3 hours of homework everyday which is too much.

Dr. Chan Kai Ming :
This reflects a very different curriculum of the ordinary school and that of the international school.

Floor :
Our children do have enough free time but they are not using it properly. The majority of them spend more than 3 hours a day watching TV. It's a matter of education for the parents to improve this situation.

Dr. Chow (Floor) :
Our children were taught to try to do their best and to win. In so doing, we are stretched to our limit and get injuries. The better approach will be to encourage our children to participate which will lower the injury rate.

Dr. Chan Kai Ming :
We should have a delicate balance between setting a goal for the kids to try their best and at the same time stressing the importance of injury prevention.

What is the situation at present at the pre-primary setting concerning activities?

Floor :
Physical play is very important in the kindergarten. For every 3 hour classes, 30 minutes is spent on physical activity and competition is not encouraged.

Dr. Chan Kai Ming :
Do you feel that kids in kindergarten have sufficient physical activities and out of school?

Floor :
The in-school activities are enough for our kids.

Dr. Chan Kai Ming :
Time is running short, we have to conclude our discussion based on the presentation and panel discussion, we should try to make proposals in 4 areas:

"Details please refer to the attached sheets."

Over the lunch break, if you have any further proposals, please come forward and fine tune on these proposals.

I would like to thank all speakers, panelists, and all who participated in being so attentive and responsive to all the presentations. We will adjourn for lunch now.

PROPOSALS FOR SPORTS AND SCHOOL SAFETY (S1 to S4)

S1 A proposal to adopt the "Bill of Right for Young Athletes - Sports Participation in a Safe Environment"

1. Right to participate in sports.
2. Right to participate at a level commensurate with each child's maturity and ability.
3. Right to have qualificd adult leadership.
4. Right to play as child and not as adult.
5. Right for children to share in the leadership and decision-making of their sports participation.
6. Right to participate in safe and healthy environments.
7. Right to proper preparation for participation in sports.
8. Right to an equal opportunity to strive for success.
9. Right to be treated with dignity.
10. Right to have funs in sports.

S2 A proposal to adopt the "Principles in Sports Injury Prevention in Childhood"

1. Proper conditioning.
2. Avoidance of excess training.
3. Appropriate competitivc environment.
4. Resolution of prior injury.
5. Appropriate supervision by certified trainers.
6. Rule changes.
7. Instruction in correct biomechanics.
8. Appropriate equipment.
9. Complete preparticipation physical assessment.
10. Appropriate matching of competitors

S3 Proposal:

All cyclist should wear protective helmets. Children are only allowed to ride on the cycle paths and cycling parks if helmets are worn. Protective helmets should be widely publicised, and encouraged before legislations are in place.

At present:

There is no legislations to ensure the wearing of safety cycling helmets, although as part of the cycling competition rules, helmets must be worn.

S4 Proposals:

For the purpose of promoting general awareness and alertness in injury prevention in childhood, it is necessary, among other things, to:

1. include essential first-aid topics in the school curriculum; and
2. required full-time careers for children to be trained and qualified as first-aiders.

* * *

INTRODUCTION ON CHILDHOOD INJURY PREVENTION

Dr. Chow Chun Bong
President
Hong Kong Paediatric Society

The problem

Each year about 1 child in 10 suffers an accidental injury for which it is necessary to call upon the health services at some level. Accidental injury is the number one killer in children above 1 years of age. Each year about 100 children under 14 years of age are killed and many more permanently handicapped or disfigured because of injuries. Accurate figures on accident-related morbidity are not available in Hong Kong.

Accidental injuries are thus expensive not only in terms of economic loss but also in terms of sufferings so caused to victims, their families, neighbours and fellow playmates or classmates. Although a priority problem, accidental injuries remain a neglected area in health policies.

Counter-measures

Accidental injuries are by no means a random occurrence. It is the result of a complex interaction of human, social and environmental factors which vary from locality to locality. By looking at these factors locally, it is often possible to identify a local pattern and to develop strategies and priorities for action.

Accident prevention in childhood must be based on a logical sequence of events : the collection and analysis of local information on the incidents and their resultant injuries, an assessment as what are the practical measures to reduce the accidents and their injuries, the introduction of these measures and an assessment of their effectiveness.

Hence there is a great need to study in detail the pattern of childhood injuries in Hong Kong - the where, how, when and why; the various factors that contribute to the occurrence with an aim to design countermeasures or programmes for intervention.

Preventive programmes need to combine education, safety engineering and regulations must be targeted appropriately.

The approach must be multi-disciplinary and needs to examine all opportunities that exist, integrate all efforts and then to incorporate injury prevention measures into existing activities and to develop new ideas. The protection of children from injuries should also be an active consideration within the decision making framework.

LEGAL RESPONSE TO CONSULTATION PAPER ON MEASURES TO PREVENT CHILDREN FROM BEING LEFT UNATTENDED AT HOME

MS. ELSIE LEUNG
Law Society of Hong Kong

That the problem of child left unattended at home needs multi-disciplinary collaboration of including supporting services, mutual help, education and legislation etc. is a well accepted principle. I shall speak only on the legislative aspects.

I consider legislative measure necessary because existing legislation is insufficient.

The Consultation Paper(para. 20 to 22) identifies Sec. 26 and 27 of the Offences Against the Person Ordinance (Chapter 212) (Schedule I), and Sec. 34 of the Protection of Women & Juveniles Ordinance (Chapter 213) (Schedule II) as existing legislation upon which legal action may be taken in case of children being left unattended where this is considered to constitute a form of wilful neglect or lack of proper care and there has been exposure to physical danger. I would disagree.

Sec. 26 is too narrow, it only applies to children under 2 years of age. Chances of parents' leaving children of such young age alone is less because they can be carried about more easily.

Sec. 27 clearly refers to non-accidental injury to the child. Here we are not talking about child abuse but accidental injury to young children.

Fire and other calamities occur to adults and children alike. It is something which we cannot legislate against. You have seen adult falling from height because he or she forgot to bring the key and

tries to gain entry by climbing from outside of an adjacent flat. You have seen adults dying in fire, or even from collapse of rescue platform. What then do we aim to protect? We feel that protective legislation is necessary because the accidents referred to in para. 3 to 6 of the Consultation Paper are avoidable and because children are incapable of fending for themselves in the case of calamities and need protection of an adult.

Sec. 27 connotes wilful intention and positive action on the part of the offender. As stated in para. 14 of the Consultation Paper, many of the accidents occurred not because the parents had intention to hurt the children but rather they are unaware of the danger and serious consequence of leaving their children unattended.

Even if I am wrong on the above, the fact that there is divided opinion whether leaving children unattended should be made an offence itself shows that the standard of parental care is not uniform. How can it be said to be wilful for those parents who are not convinced that it is wrong to leave children alone at home unless there is specific legislation to say so?

A penal statute must be strictly construed. In other words, if there is an ambiguity, the statute should be construed in favour of the subject. In Tuck v. Priester (1887) 19 Q.B.D. 629, Lord Esher M.R. said: "We must be very careful in construing (this) section, because it composes a penalty. If there is a reasonable interpretation which will avoid the penalty in any particular case, we must adopt that construction."

In modern times, this means no more than that "unless penalties are imposed in clear terms, they are not enforceable." (See Att-Gen. v. Till (1910) A.C. 50 at p.51, per Lord Loreburn L.C.)

What educational value can Sec. 27 or Sec. 34 of the Protection of Women & Juvenile Ordinance have if they do not bring out the message clearly that children should not be left unattended at home?

Furthermore, the scope of Sec. 34 is much too wide to cover cases of accidental injury on children: it provides for custody, care and control of children who do not have parents, whose parents are unfit or unable to exercise care or who are not exercising care. It could be unduly burdening the Juvenile Court and the Director of Social Welfare with applications for care and protection orders if the

purpose of legislative measure is to educate the public and to deter parents from leaving children unattended at home.

I do not think that we should promulgate a penal statute prohibiting leaving children alone at home in toto. In the present economic climate, such legislation would severely hamper women's right to work and would also work injustice towards the low income group.

36% of our labour force comprises women (Hong Kong 1991, p. 107). There are various child care and supporting services provided by the government and voluntary agencies but "it is not envisaged that the demand can be met in full in the near future ... and the primary responsibility for ensuring safety of children should rest with their parents" (see para. 12 of Consultation Paper). If mothers who by tradition play the role of child minder in the family cannot leave children at home, they would have to stay home, thereby reducing the family income and depriving them of personal development of a life outside home.

Furthermore, it is very arguable that such legislation would discriminate against lower income group because they cannot afford domestic help, whilst middle income and upper class families can easily engage a couple of Filipino maids and would not be subject to the threat of criminal prosecution.

It is true that in other countries, they have legislation of varying scopes and covering different situations forbidding parents to leave children alone, but domestic legislation must have regard to the local situation: in some countries, because of their tax or social welfare system, it might be more beneficial for the mother to stay home instead of going out to work. In such case, there would be little excuse for them not to look after the children.

There is no legislation in the United Kingdom prohibiting parents from leaving children unattended at home. There is only the statute to protect children from the risk of burning which reads:

> "If any person who has attained the age of 16 years, having the custody, charge or care of any child under the age of 12 years, allows the child to be in a room containing an open fire grate or any heating appliance liable to cause injury to a person by contact with it, which is not sufficiently protected to guard against the risk of the child being burnt or scalded without

taking reasonable precautions against that risk, and the child is killed or suffers serious injury for that reason, that person is guilty of an offence and liable on summary conviction to a fine not exceeding level I on the standard scale." [Halsbury's Laws of England, 4th Ed., Vol. 11(1) para. 538]

In U.K., the danger is open fire grate or heating appliance. In Hong Kong, it is the high-rise buildings and the risk of fire. Steel casement can be used to prevent children from falling from height and keys can be entrusted to neighbours or Management Office to unlock the door in the case of fire.

I would therefore suggest the promulgation of legislation in line with the following:

> Any person who has attained the age of 16 years, having the custody, charge or care of any child under the age of 10 years, allows the child to be left unattended in a unit without taking reasonable precautions against the risks of danger to life or serious physical injury, that person is guilty of an offence and liable on conviction to a fine not exceeding $..... and to imprisonment for .... months/years.

Such legislation, if enacted, will bring the message clearly to the public, and will have not educational and deterrent value.

The word "unattended" will have its grammatical meaning and it would not be unnecessary to define the space in time and place because if precaution is taken, the child is not unattended.

I believe that discretion to prosecute should like other offences be vested in the police or the Director of Public Prosecution and the statute should not specify whether prosecution should be taken in respect of first offender or a habitual offender.

At present, teachers, doctors, neighbours, social workers and others do not report leaving children unattended at home because they do not know if it is against the law to do so. If the law is promulgated with clear language and given sufficient publicity, no doubt the public will be more willing to come forward and report and it would be unnecessary to make reporting mandatory. There are strong arguments against making reporting mandatory. Many doctors perceive the law as threatening to their relationship with their patients and suggested

that it would be an active deterrent to parents seeking medical assistance for their children. Furthermore, to promote mutual help, good relationship between neighbours should be maintained.

On the power of entry, the present powers under Sec. 34E and 44 of the Protection of Women and Juveniles Ordinance are adequate if the proposed new law is incorporated into the said Ordinance. It is unnecessary for the power of entry to be dealt with separately.

The power of entry cannot be in breach of human rights because as Kempre points out in "Recent Developments in the Field of Child Abuse" (1978) Child Abuse & Neglect 2.261": "the question of the rights of parents to be left alone must be weighed against the rights of the child to be protected from parents unable to cope at a level assumed to be reasonable by the society in which they reside" and Fontana said in "Somewhere A Child is Crying (Macmillan, New York 1973): "Society has to face the reality that not all parents can or will care for their children properly. Indeed some parents will place their children at risk. In such circumstances children are entitled to the protection of the State". Article 14 of the Bill of Rights provides that no one shall be subjected to arbitrary or unlawful interference with his privacy, family, home etc. If the provisions of Sec. 34 &44 are followed, it is submitted that it would neither be arbitrary nor unlawful.

Finally, no law is the ultimate answer to any problem, and resistance to the law is often based on a lack of understanding of the intention behind the law. The present suggestion of legislating against leaving children unattended at home without reasonable safety precautions does not aim at punishing the parents, but to maximize the deterrent and educational measures for what in our society is considered as falling below the standard one should expect of a reasonable parent. Children are entitled to be protected in a wide range of situations which could be detrimental to their emotional and physical well being and Government is obligated to develop a wide range of services which give expression to that entitlement. Legislation is the first step.

INJURIES TO HEALTH CAUSED BY SMOKING

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Although the Conference is entitled 'Injury Prevention in Childhood' I am going to take a slightly unusual approach to this as this paper will deal with the injury to the child caused by smoking and what can be done to prevent such injury.

Smoking is injurious to health and is the single most important preventative cause of death in our society. A quarter of all smokers' health is so compromised that they die prematurely and 300 people die each year in Hong Kong from smoking related diseases.

The injury to the child starts from the moment of conception if the mother is a smoker (and there is some evidence emerging that paternal smoking also appears to have an effect). Smoking in pregnancy is an important determinant of low birth weight in babies worldwide. On average, babies are born 200gm lighter if the mother smokes. Low birth weight on its own per se is not necessarily detrimental but a weight lower than would be expected is associated with intrauterine oxygen starvation and other neonatal complications.

Other risks associated with fetal development if exposed to maternal smoking in the short term are:-

1. spontaneous abortion,

2. perinatal mortality (death between the 28th week of pregnancy and the 4th week post birth),

3. sudden infant death syndrome

and in the longer term:-

1. throughout infancy, more respiratory tract infections, wheeze and asthma,

2. decreased lung function, that is, the reduced ability of the lungs to work properly,

3. increased risk of middle ear infection,

4. carcinogenic effects[1],

5. at the age of 10, these children are still shorter and lighter than their peers and therefore not achieving their full growth potential,

6. but even more important, these children are not only physically affected but their mental development is also retarded. These children have been found to be delayed in development of their verbal and reasoning skills and mathematical performance[2].

What price can we put on mental injury from under achievement and even failure in these children? All of this, from exposure to passive smoking during fetal life.

Further injury to health is added with exposure to environmental tobacco smoke if the child grows up in a household where one or more of the other household members smoke. Data from an ongoing Respiratory Health Study of children living in Hong Kong started in 1989, by the Departments of Community Medicine and Paediatrics showed that if a child lives in a household where a parent smokes they have a greater chance of experiencing one or more respiratory symptoms. For example,

- there is a 30% greater risk of having a cough in the evening if the father smokes

- a 137% greater chance of phlegm in the morning if the mother smokes.

If there are others living in the home who smoke,

- the excess risk is 34% for the child to have phlegm in the morning

- and 120% for having a cough in the last three months[3].

In addition, it is now well documented that passive smoking is a risk factor in children for wheeze, asthma, respiratory tract infections, increased hospital admissions, and in the longer term for cancer of the lung[4].

Of course if the child is an active smoker the threatened injury to health is also present to an even greater degree. The excess risk for self smoking in the above study ranged from 79% for a blocked nose to 225% for a sore throat. If the child is an active smoker and continues to smoke into adulthood, respiratory function is further compromised and if we interpret the title of this conference broadly, prevention of injury caused by smoking in childhood by prevention of smoking in children will lead to reduced risk of developing chronic heart disease, emphysema and cancer in a number of sites and systems of the body including those of the respiratory system; pharynx, larynx, and lung, digestive system; upper digestive tract and pancreas, and urinary system; bladder and kidney, in later life[5].

In addition to the health risks associated with smoking we have the obvious injuries to children and adults caused by fires. In 1992, up to the end of August, 15% of all fire calls were for fires attributed to smoking materials, for example, playing with matches, careless disposal of cigarette ends. In 1991, 37 people died as a result of a fire, 11% of whom were children[6].

So how many people are we talking about who are in the process of injuring their own and everybody else's health through the production of tobacco smoke and the irresponsible discarding of the waste product? The Government's General Household Surveys include a number of questions on smoking and give the percentages of smoking adults in the territory of Hong Kong[6,7]. In 1990, for men the overall percentage was 28.5% and for women 2.5%. Numbers are falling but this decline is not across all ages. Data for women for the period 1982 to 1990 show a decline for the 40 to 60 year olds,

	1982		1990
60+	14.8%	-	5.2%
50-59	11.7%	-	2.3%
40-49	6.6%	-	1.5%

but for those below 40 years of age, there is no decline, and in fact an increase in prevalence of smoking for two of the age bands,

	1982		1990
30-39	2.6%	-	2.1%
20-29	1.5%	-	2.0%
15-19	0.4%	-	1.1%

The numbers for children smoking are depressing. Data from the Respiratory Health Study, collected in 1991, on just under 10,000 children showed that the number of 8 year old ever smoking boys is not low at 7%, but for both boys and girls, the numbers increase with increasing age, girls lagging behind boys, but with a similar trend, until at 15 years of age, 46% of boys and 50% of girls are ever smokers. The definition of an ever smoker is someone who has smoked at sometime but who may or may not be smoking now, ranging from a few experimental puffs to over 6 cigarettes per week.

What can we do to prevent such injury to health ?

At the parents' level :

1. Change parental practice
   - encourage parents not to smoke, the example set by the parents encourages the child to follow a similar pattern of behaviour. 47% of children in our study who smoke have one or more family members who smoke
   - eliminate passive smoking in the home and its consequent effects on health

2. Change parental attitude
   - 2% of fathers and 3% of mothers agree to or don't mind a child smoking. There was even less concern if the question referred to their own child smoking - 2% of fathers and 5% of mothers didn't mind their child smoking.

. In addition, of the children who smoked
22% got their cigarettes from their father,
4% from their mother,
36% from other relatives, i.e. grandparents, siblings, etc.
45% from friends and classmates.

At the child's level :

1. Change children's access to cigarettes
. Make it difficult for children to obtain cigarettes from family members,

. Make it difficult to buy cigarettes from retail outlets. 12% of the children who smoked bought their cigarettes, mainly from stores and supermarkets, irrespective of the child's age; and this is not just a tobacco problem, we also read in the paper about the ease with which children can buy cough mixture, for inhaling, and the same applies to glues for sniffing.

2. Change children's attitude
. Children, especially child smokers, perceive smoking as fun, grown-up, giving confidence, looking tough, and of course the tobacco industry portrays such an image and the encourages the myth. Children at primary school level need health education on addictive substances, they need to be shown the reality behind the advertisements and they need to develop skills to say no.

In summary, a reduction in active and passive smoking in childhood will not only reduce injury to health in childhood but promote better health and development in the same children. Furthermore, the effects will be carried on into adulthood.

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PROPER PRE-HOSPITAL CARE TO THE INJURED CHILD

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Introduction

Researches on the effect of pre-hospital emergency care reveal that adequate assistance rendered within a certain short period of time will decrease the mortality and morbidity of a casualty. In fact, cardiopulmonary resuscitation initiated immediately by a bystander will maintain oxygenation of the casualty's vital organs and has proved to be an effective means of saving life. Therefore, proper pre-hospital care provided by a nearby available layman is an important issue and should be emphasized nowadays.

With the emphasis on improving the advanced life support techniques for the ambulance/casualty staff in recent years, the Auxiliary Medical Services (AMS) is one of the organizations which has committed its contribution towards this direction, namely : promoting the preparedness and awareness of the general public in accident prevention and pre-hospital care techniques.

Auxiliary Medical Services

AMS is a medical civil defence organisation funded by Hong Kong government since 1950 and is established under the Essential Services Corps Ordinance. Its members come from all walks of life. Youths who are keen and willing to help their fellow citizens may join AMS as volunteers. Upon joining the Service, each member is required to undergo an initial training programme which focuses on first-aid and casualty-handling. Thereafter, further training related to home-nursing, life-saving and the manning of ambulance are available to members in different divisions.

Besides being in full readiness to perform emergency roles and functions, all members of the AMS commit themselves in various activities designed to render first-aid/nursing services to the community during normal times. Manning of first-aid posts and ambulances in various country parks and staff first-aid posts at public functions likely to be attended by large crowds is an example of their commitment towards the vulnerable, especially the youngsters and the aged.

Common Childhood Injuries handled by AMS

External wounds and limbs injury are two common types of childhood injury handled by AMS members whilst on duty. Normally children are accompanied by their parents to attend public functions during holidays and weekends. The function venues which are normally temporarily set up are the potential site of childhood injury. Children always get injured when parental supervision becomes lax during the proceeding of these activities.

Problem Encountered

Experience shows that parents always make avoidable mistakes in giving first-aid treatment to their children, thus aggravating their children's injury. If AMS members are called to attend the case immediately after an accident, the injured children will receive proper treatment and appropriate medical advice will be given to their parents. The manner and ways in handling of injury of the children will of course make a great difference in the prognosis of the children.

Proper First-aid Treatment

The proper handling of the injured children at scene before the arrival of qualified medical personnel is both essential and important. Appropriate first-aid treatment will help to save the children's life, prevent their conditions from getting worse and promote recovery. Experience shows that general knowledge in first-aid is not commonly possessed by the general public especially in this Chinese society. Many parents are quite ignorant as far as general knowledge in first-aid is concerned. At present it seems that training in this area is quite inadequate because of limited resources and public concern/emphasis. For the past few years, AMS has been

actively involved in providing this kind of training. Through requests from schools, Social Welfare Department and voluntary agencies, AMS has organised and delivered talks and lectures to parents and school teachers. In addition to the essential techniques in first aid, proper casualty handling methods and appropriate health care for sick children have been included in the training programmes.

Recommendation

Children not only have the right to be brought up in a injury-free environment but also have the right to receive proper care upon suffering from injuries. It is recommended that the basic essential first-aid techniques should be learned by all parents and those personnel who are required to take good care of children. For instance full-time children careers (in whatever discipline of occupations) should be trained as qualified first-aiders. A common policy should therefore be ironed out by various organizations in a bid to make first aid training feasible and cost effective for those full-timers. In the long run, first-aid topics should also be incorporated into the school curriculum so as to ensure that our next generation will be given the opportunity of being equipped with the basic techniques in first-aid.

INJURY PREVENTION IN CHILDHOOD
GENERAL SAFETY

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INTRODUCTION

Injury and poisoning is the fifth leading cause of death in Hong Kong for all age groups. But, if we focus our attention to the below 15 age group, then it is readily apparent that injury is the most important cause of death for our children.(Table 1) Indeed, if we examine our mortality figures from the point of view of potential life year lost, injury and poisoning is the third most important cause after malignancy and heart disease. Under the current system of resource allocation a comparatively insignificant amount is spent in the prevention, treatment and research of this important social malady.

Table 1: Fatal Injuries/Poisoning for Child < 15. 1989

	<1	1-4	5-14	Total
Transport Accidental	*0*	*5*	*23*	*28*
Accidental Poisoning	*0*	*0*	*0*	*0*
Other Accidents	*4*	*18*	*22*	*44*
Suicide	*0*	*0*	*2*	*2*
Homicide, NAI	*1*	*2*	*1*	*4*
Total	*5*	*25*	*48*	*78*

Source: HSD Departmental Report. 1989-90

SIZE OF THE PROBLEM

Before we set about dealing with the problem we should first try to gauge the size of the problem we are facing. Mortality statistics are available from the death registry. From the above table we can see that in 1989, 78 lives were lost due to all sorts of injuries. Home accidents and traffic accidents were the most important culprits in robbing these young lives. What about those children who are disabled and maimed by injuries.

Epidemiology of the non fatal cases are not reported previously in Hong Kong. In other countries some studies or registry are available and data will usually include age distribution, mechanism of injury etc. (Walker & Cass, 1987 ; Moore, 1990) Let us look at our traffic accident figures for a hint first. (Table 2)

Table 2: Traffic Accident Injuries in Child < 15

Year	*Annual*	*Per Day*
1980	*3587*	*~ 10*
1991	*2634*	*~ 7*

Source: Government Statistics

From the above figures, we can see that potentially each day 7 kids could be disabled (perhaps temporarily) by traffic accident in 1991. But from our experience working in Emergency Departments, domestic accidents are far more frequent than traffic accidents. Luckily most of these injuries are minor. Falls are the most common mode of injury by far. Cuts and scalds are also fairly common. Exact incidences of these injuries are not available. We can only infer the size of the problem by our limited data. During the four months from July, 92 to October, 92 there are 85 paediatric fractures (out of a total of 149) treated with plaster immobilization in our department. Of these the majority (92%) are upper limb fractures. This is probably an underestimation since some patients were referred immediately and some prefer to see bone setters. So roughly we would expect to see at least one limb fracture a day in our department.

What about the more severe cases who are admitted for in-hospital treatment. Earlier this year we did a study on the admitted cases and we found that about 14% of admissions for the below 20 age group was trauma related. But paediatric trauma admission only constituted about 2% of the overall admission. Head injury was the most frequent cause with fracture coming second.

This kind of fragmentary data is of course not enough for us to have an adequate understanding of the whole problem. Better territory wide data collection is necessary to give us a clearer picture. Perhaps, some form of National Paediatric Trauma Registry as in the States should be created. Alternatively some large scale periodic studies should be conducted. The Princess Margaret Hospital Paediatric Injury Surveillance Project provides a very good starting point for the collection of relevant epidemiological data.

OVERSEAS EXPERIENCE IN PAEDIATRIC TRAUMA

Since local data are quite limited, it may be more instructive to examine studies conducted overseas. In 1985, an Institute of Medicine white paper entitled "Injury in America" concluded that "Injury is the major health problem facing young Americans today". (Trunkey, 1990) This is true also in Hong Kong as we have already pointed out above in the analysis of potential life year lost.

In a retrospective study of 1000 trauma deaths by the Royal College of Surgeons of England, it was found that of the 514 patients who were admitted to hospital alive, 102 deaths (20%) were judged by all four assessors to be preventable and 170 (33%) were considered by three assessors to be avoidable. (Anderson et al, 1988). It was also noted that 43% of deaths not related to the central nervous system and 7% of those related to it were potentially avoidable. (Court-Brown, 1990)

Earlier studies in the States by Cales & Trunkey (1985) also pointed out that some 24 to 40 percent of deaths in injured children were preventable. Sharples et al (1990) reported that 42% of the 255 deaths of children with head injury in Newcastle might be avoidable. Similar inquires in Australia in 1988 also yielded similar results. (Dept. of Health, NSW)

Although there is no formal study in Hong Kong, there is no reason to believe that we are performing any better than these more developed countries.

So, what has gone wrong?

WEAKNESSES OF OUR TRAUMA CARE

In order to be successful in the treatment of major trauma, the whole "Chain of care" should be well organized and effective. This chain consists of many rings which include: (Pepe, 1990)

1. Access to the EMS system
2. Bystander educated in proper first aid and hazard recognition
3. Well integrated first responder program
4. Rapid response transport service with advanced life support capability
5. Specialized receiving facilities

Let us retrace our path from the hospital to the scene of the accidents.

Although the largest group of children attending ED is due to trauma the injuries are usually minor. Only about 0.5% of attendance of an A&E department is multiple trauma patients and thus experience is limited. In 1989, there were only 78 patients with fatal injuries. And if this group was evenly distributed among ten Emergency Departments then each would be seeing eight critical patients a year. Even if we include non fatal but critical cases we may still be seeing one or two critically injured children in a month. For the individual doctor working in the department he may only attend one or two such cases a year. The volume is obviously too small to build adequate experience. Experience in UK also indicated that peripheral hospitals were not making the right diagnosis and providing adequate initial treatment (Court-Brown, 1989)

The other problem is lack of effective organization as a team. The Major Trauma Outcome Study by the American College of Surgeons discovered that 62% of hospital trauma death occurred within the first 4 hours. (Trunkey, 1990) It is now well known that what is done or not done during the so called Golden Hour is of vital importance. In many local hospitals, there are still no trauma team which can be