PQ3293/04

DATE FOR ANSWER: TUESDAY 2 NOVEMBER 2004

Mrs Iris Robinson (Strangford). To ask the Secretary of State for Northern Ireland, what action he has taken to (a) improve knowledge of intravenous fluid management and (b) prevent deaths of children from dilutional hyponatraemia in hospitals in the Province and if he will make a statement. **(194641)**

ANGELA SMITH

There is undergraduate teaching on fluids and electrolytes and the topic of fluid management is included during the induction training of junior doctors. Also the Department of Health, Social Services and Public Safety has issued guidance on the prevention of hyponatraemia in children (March 2002) and the Clinical Resource Efficiency Support Team (CREST) has also issued guidance on the management of hyponatraemia in adults (June 2003).

The guidance issued by the Department in March 2002 stresses that hyponatraemia can be extremely serious and potentially fatal. The guidance has been prepared as an A2 sized poster for display in all hospital units where children may receive IV fluids or oral rehydration.

_____ Date: _____

DHSSPS

005-013-077

BACKGROUND NOTE TO PQ3293/04

1. This is one of 2 Parliamentary Questions asked by Iris Robinson MP regarding hyponatraemia and the investigation of hospital deaths in the Province (PQ 3293/04). They are thought to be linked to the death of Lucy Crawford and a recent television programme on the subject.

2. Hyponatraemia can be extremely serious and in the past few years has been responsible for two deaths of children in Northern Ireland that have been widely reported in the media. Hyponatraemia is a problem of water balance and most often reflects the failure to excrete water. Stress, pain and nausea are all potential stimulators of the antidiuretic hormone ADH which inhibits water excretion.

3. Any child receiving IV fluids or oral rehydration is potentially at risk of hyponatraemia. The administration of excess or inappropriate fluid to a sick child may result in serious or life threatening hyponatraemia. There is a particular concern about the use of 0.18% Sodium Chloride in Glucose among children as it has been implicated in cases of hyponatraemia. While it may pose a risk because of the relatively low sodium content no specific fluid is without risk.

4. The Department issued guidance on the prevention of hyponatraemia in children in March 2002. This guidance emphasises that every child receiving intravenous fluids requires a thorough baseline assessment, that fluid requirements must be calculated accurately and fluid balance must be rigorously monitored. Following this advice will prevent children from developing hyponatraemia. CREST has also issued guidance on the management of hyponatraemia in adults (June 2003).

5. The Department is planning to do further work to develop a care pathway for fluid management in children.

6. The Department is presently considering whether any further investigation into the circumstances surrounding the death of Lucy Crawford is required.

Reply prepared by

Ruth Fisher
Eastern Board Unit
Secondary Care Directorate
[redacted]

Andrew Browne
Eastern Board Unit
Secondary Care Directorate
[redacted]

DHSSPS

005-013-078