Just 2% of child drug trials included independent safety checks says review of over 700 studies

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Only two per cent of paediatric drug trials reported that they had established independent safety monitoring committees that can help lead to the early detection of adverse drug reactions, according to a major review in the April issue of *Acta Paediatrica.*

Child health researchers from the University of Nottingham, UK, carried out a detailed analysis of 739 international drug trials published between 1996 and 2002 to see what safety measures were in place and to monitor the levels of adverse drug reactions.

Just under three-quarters of the trials (74 per cent) described how safety monitoring was performed during the study, but only 13 studies (two per cent) had independent safety monitoring committees.

“We were very surprised by the low level of trials that had independent safety monitoring committees and are urging pharmaceutical companies to include these in all future trials involving children” says lead author Dr Helen Sammons, Associate Professor of Child Health.

“It is essential that appropriate drugs are developed for use in children and clinical trials need to continue. They are vital because they increase the chance of picking up adverse reactions before drugs are introduced into general clinical practice.”

Dr Sammons and her colleagues found that:

-- Seven out of ten trials reported adverse events and a fifth of the trials reported a serious adverse event (an untoward medical occurrence, not necessarily related to a drug).

-- Adverse drug reactions were reported in just under 37 per cent of trials, with 11 per cent of trials reporting moderate or severe adverse drug reactions.

-- Six clinical trials – which all had safety monitoring committees – were terminated early because of significant drug toxicity.

-- Deaths were reported in 11 per cent of the trials, but the majority were thought to be unrelated to the drug use.

-- Death rates were highest in trials involving premature babies, with 56 per cent of the 99 trials included reporting a death.

-- Other major specialities in which deaths were reported included infectious diseases, neurology, respiratory and kidney problems.

Only papers published in English on the Medline database during the seven-year study period were included and the authors excluded studies that covered HIV and cancer because of high deaths rates from the actual diseases.

More than half of the studies (54 per cent) compared a drug with a placebo (dummy) and a further third (35 per cent) involved a new medicine. A smaller percentage (26 per cent) involved a direct comparison between two established drugs. Some of the trials included adults as well as children.

Studies reporting severe drug toxicity problems came from a wide range of countries, including Argentina, Belgium, Canada, Chile, China, France, India, Israel, Italy, Japan, Netherlands, South Africa, Sweden, Taiwan, Thailand, Turkey, UK and the USA.

Adverse drug reactions included bleeding, high blood pressure, seizures, psychosis, suicide, acute renal failure and death.

The researchers stress that clinical drug trials in children are essential for the development of medicines and to provide evidence of the best treatments for specific conditions. But they feel that greater safety measures and awareness of the risk is essential.

“We need to test drugs on children as the only other options are to use unlicensed drugs or prescribe drugs that have been licensed for adults off label - outside the terms of their licence” says Dr Sammons.

“But we feel that the small number of studies that reported having safety monitoring committees was unacceptable. It is invaluable to have an independent monitor who can swiftly question any adverse drug reactions or differences in illness and death rates between groups taking part in the clinical trials.

“Parents also need to be made aware of the risks of adverse drug reactions when a child takes any medicine so that they can make informed decisions that balance those risks against the possible benefits the drug may provide their child.

“In a drug trial this should include information on the mechanisms that will be used during the clinical trial to safeguard the children taking part.”

Dr Sammons points out that the number of paediatric drug trials is likely

to rise in the European Union, following new legislation that provides companies with a valuable financial incentive - a six-month extension to their exclusive manufacturing licence for a drug if children are included in the clinical trials. Similar legislation has been in place in the USA for over five years and has led to an increase in drug trials that include children.

“There is general agreement by paediatric health professionals, regulatory authorities and the pharmaceutical industry, as well as politicians and parents, that drug trials are essential in order to improve drug therapies.

“We are calling for all paediatric drug trials to include independent safety monitoring committees to ensure that this vital work is carried in a way that minimises risks, and maximises benefits, for the children taking part.”

Source: Blackwell Publishing Ltd.