There has been longstanding concern among physicians and policymakers that false-positive results may cause parents to believe that their children are vulnerable to illness, leading them to overuse health care services as their children grow older.

However, a new study from the University of Michigan's Child Health Evaluation and Research (CHEAR) Unit, in collaboration with the Michigan Department of Community Health, has found that this is not necessarily the case.

When babies are born, small samples of their blood are tested for a variety of inherited diseases that could seriously affect their health. While these screening tests are typically quite accurate, they occasionally return false-positive results - meaning a child tests positive for a disorder he or she does not have.

Using data from nearly 50,000 children during the first year of life, researchers compared the number of inpatient, outpatient and emergency visits made by 818 children who received false-positive results and their counterparts who tested normally. They found that most children with false-positive results did not have more health care visits than those with normal results.

"These findings shed useful light on the debate about parents' experiences with false-positive newborn screening results," says Beth A. Tarini, M.D., M.S., an Assistant Professor of Pediatrics at the U-M Medical School. "In future research, it will be helpful to learn more about what helps parents to be resilient to the false-positive experience with their very young infants."

There was one group of children who did visit the doctor more often: preemies. Children who were born prematurely and received false-positive results did have more outpatient visits than their peers who tested normally.

"Our findings about false positive tests for premature infants are something new for the medical community to try to understand," says Tarini, the lead author of the study. "We need more studies on the psychosocial effects on parents of false-positive results in these children."

Researchers caution that because the study of both term and premature infants only focused on those enrolled in Medicaid, it could be that the results are specific only to that population.

"It's possible that parents do not suffer from lingering anxiety about their child's health. Alternatively, it may be that parents in this group of Medicaid-insured children had difficulty accessing health care for their kids," says Tarini.

Tarini recommends that future studies examine whether the phenomenon of parental anxiety is only evident in certain groups who are prone to worrying about their children, namely those who had difficulty conceiving, first-time parents or parents with anxiety disorders.

In addition, it is possible that looking at the number of visits is not the most effective way to assess parents' anxiety levels, researchers say. "It is possible that parental anxiety about false positive results may also show itself through other actions, such as decisions to not have more children or restrictions of the child's activity," says Tarini.

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