Title: Relationship between Viral Load and Behavioral Measures of Medication Adherence among Children and Adolescents with HIV Infection.

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Study Description: Health problems can develop in children with HIV when they miss their medicines. We need to understand what makes it hard for children to take their medicines. To do that, we need to figure out the best ways of asking about how well the children take their medicines. “Adherence” is what we call how well someone takes their medicine just as the doctor told them to.

We asked children and their caregivers questions about the children’s adherence to their HIV medicines. We also measured the children’s HIV viral load. We compared their answers to the adherence questions with the child’s HIV viral load. We wanted to see if children who reported good adherence had lower viral loads. We also compared the children’s answers with their caregivers’ to see if they matched. And we looked at things like the child’s age and who they lived with to see if these things could explain the relationship between adherence and viral load.

Study Population: We asked 187 children with HIV age 7 to 16 questions about their adherence to their HIV medicines. They answered the questions without their caregiver present. The caregiver answered the same questions, also in private. We divided the children into two groups. In one group, the children had a high HIV viral load. In the other group, the children had a low viral load. Then we looked at whether the children and caregivers in the two groups gave different answers to the adherence questions.

Results: Children who said they missed some medicine in the last week (in other words, their adherence wasn’t good) had higher viral loads than children who said they had not missed medicine (in other words, they had good adherence) in the last week. Children and their caregivers gave very similar answers to the adherence questions. Children 13 and older were more likely than those younger than 13 to have high viral load. Children who lived with their birth mothers or other relatives were more likely to have high viral load than children who lived with non-relatives.

Conclusions: The questions we used were good measures of adherence because they predicted the child’s viral load. The age of the child and who the child lives with can also give us important information about problems the child might have adhering to HIV medicines.

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