

# Acceptance of Oral Rapid HIV Testing in the Emergency Department of an Urban Pediatric Hospital: Rates of Agreement between Adolescents and their Guardians.

N Rakhmanina<sup>a,c,d,e</sup>, A Baghdassarian<sup>d,e</sup>, L Walkoff<sup>fd</sup>, D Liberman<sup>b,d,e</sup>, M Khan<sup>e</sup>, J Chamberlain<sup>b,c,d,e</sup>, A Sill<sup>e</sup>

<sup>a</sup>Division of Infectious Diseases, <sup>b</sup>Division of Emergency Medicine, Departments of <sup>c</sup>Pediatrics, <sup>d</sup>The George Washington University School of Medicine and Health Sciences, <sup>e</sup>Children's National Medical Center, Washington, DC

## BACKGROUND

In 2006 the CDC revised recommendations for HIV testing in the US in response to the persistently high numbers of new HIV cases annually in the US and late diagnosis of infection leading to higher morbidity and mortality.<sup>(1,2)</sup> In the US young African Americans are disproportionately affected by HIV infection, accounting for 55% of all HIV cases reported among persons aged 13-24 years of age.<sup>(3-5)</sup> In DC roughly one out of every 100 young people (13-24 yrs old) is HIV infected or has AIDS, and HIV infection rates among DC youth tripled during the period 2000-2005 compared to the previous 5 years.<sup>(3)</sup> Yet, the District-wide health survey shows that only 50 % of young people have been tested for HIV.<sup>(6a)</sup> Children's National Medical Center (CNMC), a leading pediatric care provider in metropolitan DC, is in the process of implementing an oral fluid rapid test for HIV (ORTHIV) in the Emergency Department (ED). In preparation for the ORTHIV roll-out, we performed this study to quantify ORTHIV acceptance rates among adolescents and their guardians.

## HYPOTHESIS AND AIMS

The implementation of routine HIV testing in ED requires special considerations for adolescent patients.<sup>(7)</sup> Adolescents tend to conceal high-risk practices from their parents/guardians and in reality, are more aware of their risk for acquiring HIV than their guardians. It is therefore conceivable, that the adolescents, who perceive their risk of HIV infection due to their known risky behaviors, might be less opposed than their parent/guardian, to accept rapid HIV testing in medical settings, such as a pediatric hospital ED. At the same time, adults are more aware of the consequences of an HIV diagnosis on their dependents (such as stigmatization and rejection) and might have more social and community disclosure concerns. Fears of those consequences might prevent adult parents/guardians from addressing the issue of HIV testing in outpatient and emotionally challenged young family members. We hypothesized that the parents/guardians will report more barriers toward oral rapid HIV testing in ED settings than the adolescent patients. We also hypothesized that the presence of a guardian might diminish acceptance rates of oral rapid HIV testing in the ED among adolescents.

## METHODS

From May 2008 through September 2008 we conducted a survey of adolescents and their guardians about their acceptance of oral fluid HIV screening and their preferences in result disclosure:

- An anonymous, voluntary, self-administered survey was offered to adolescent patients (≥13-21 yrs) and their guardians in the CNMC ED.
- Patients with acute trauma, life threatening events, pain scores >7 /10, psychiatric complaints, developmental delay or mental retardation, inability to speak or read were not approached.
- Questionnaires were available in English and Spanish languages. The study protocol and survey forms were approved by the CNMC IRB.
- Questionnaires for adolescents and their guardians contained pre-printed paired numbers (example 1A and 1C) denoting adolescent and guardian that permitted anonymous linkage of adolescents and their guardians for the purposes of conducting paired statistical analyses.

The survey asked adolescents and guardians about their acceptance of ORTHIV and asked about the specifics of their preferences in result disclosure and reasons for refusing consideration of HIV screening. Frequency distributions of the responses were reported in percentages, and % agreement was calculated by 2x2 contingency analyses.

## RESULTS

Of the 496 adolescent/guardian pairs approached 410 pairs (83%) participated in the survey.

### CHARACTERISTICS OF ADOLESCENTS

- 53% were female
- 75% were Black, non-Hispanic
- Median age - 15 yrs (13-21 years)

### CHARACTERISTICS OF GUARDIANS

- 64% were female
- 63% were Black, non-Hispanic
- Median age - 40 yrs (18-98 years)

### ACCEPTANCE OF THE ORAL RAPID HIV TEST BY ADOLESCENTS (Table 1)

- 282/388 (73%) of adolescents reported that they would accept HIV test in the ED
- 228/380 (60%) of adolescents felt that the ED was a suitable environment for ORTHIV
- 140/408 (34%) reported that testing **alone** (without guardian present) would make a difference:
  - ✓74/140 (53%) would consider declining the test due to guardian's presence because they would not want them to find out about the test results
  - ✓65/140 (46%) would consider declining the test without guardian's presence because they would not want to do it alone)
  - 115 adolescents gave no opinion about ED being a good place to perform ORTHIV

### ACCEPTANCE OF THE ORAL RAPID HIV TEST BY GUARDIANS (Table 1)

- 250/324 (77%) of guardians would agree to have their teenagers tested for HIV in ED
- 279/380 (73%) guardians felt that the ED was a suitable environment for ORTHIV
- 52 guardians gave no opinion about ED being a good place to perform ORTHIV

### DISCLOSURE OF THE HIV TEST RESULTS (Table 1)

- 320/383 (84%) wished to receive results directly from ED personnel
- 292/383 (76%) of the guardians wished to receive results directly from ED personnel
- 174/246 (71%) of the adolescents preferred to be informed about test results **before** their guardians
- 212/246 (86%) of the guardians preferred to be informed about test results **before** their adolescents

### DISAGREEMENT IN RESPONSES (Table 1)

- The lowest rates of agreement in responses between adolescents and their guardians were reported on the opinion about adolescent being at risk for HIV, preference to perform the test at alternative location, non-acceptance of the ORTHIV in ED and belief that ED is not a good place to perform ORTHIV (percentage of agreement marked in blue)

Table 1. Results of the Oral Rapid Test for HIV (ORTHIV) Survey

ORTHIV Preferences	Adolescent (n answered yes/total number of answers to the question)	Guardian (n answered yes/total number of answers to the question)	Percent Agreement
Ever heard about ORTHIV before	154/392	95/202	95/154 (62%)
Would want to have ORTHIV of the teen in ED	282/388	250/324	250/282 (89%)
Would prefer to be tested alone without guardian present in ED	74/140	N/A	
Believe the ED is a good place to perform ORTHIV	228/380	279/380	174/228 (76%)
Believe the ED is <b>not</b> a good place to perform ORTHIV	37/380	49/380	6/37 (16%)
Would prefer to be told about the results directly by ED staff	320/383	292/383	292/320 (91%)
Would prefer to be told about the results <b>first</b> *	174/246	212/246	150/174 (86%)
<b>Reasons to Decline ORTHIV</b>			
Will stay longer in ED	12/12	0	na
Do not think I am (my child) is at risk	49/143	6/13	6/49 (12%)
Do not feel comfortable in ED (privacy concerns)	16/16	0	na
Prefer to have it done at another location**	20/143	31/143	6/20 (30%)

\* - **"First"** means prior to guardian for adolescents and prior to adolescents for guardians  
 \*\* - Another location was defined as "Doctor's office or anonymous testing site"

## CONCLUSIONS

- There is a high rate of acceptance of the hypothetical oral rapid HIV test in the ED of the large metropolitan pediatric hospital.
- Most adolescents perceived that HIV testing could be carried out in a protected and confidential manner by ED personnel.
- While the majority of the adolescents and their guardians accepted the HIV screening in ED, there was a high rate of disagreement between the adolescents and their guardians on who should be notified about the HIV test results first.

HIV screening of adolescents poses a challenge for ED providers who must address the testing of the adolescent and acknowledge the involvement of the guardian. Expanding HIV testing to youth in ED would likely be accepted by adolescent patients and their guardians and will require balancing of the adolescents' right to confidentiality with the presence of their guardians.

## References

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