High Hepatitis C Infection Rate in Birth Cohort Testing of an Urban, Primary Care Clinic Population

Alexander Geboy[1], Sandeep Mahajan[2], Allison Daly[1], Candice Sewell[2], Won Cho[2], Carmella Cole[2], Dawn Fishbein[2]

[1]MedStar Health Research Institute, Hyattsville, MD, [2]MedStar Washington Hospital Center, Washington, D.C.

Poster 628
Alexander G. Geboy
202-877-0679
Alexander.G.Geboy@medstar.net
Funding: CDC-RFA-PS12-1209PPHF*Category B, Part 3*

BACKGROUND

• The Centers for Disease Control and Prevention (CDC) and United States Preventive Services Task Force (USPSTF) recommend that all persons born between 1945-1965 ("Birth Cohort") (BC) should be tested for hepatitis C virus (HCV) infection at least once, given a 3.25% prevalence rate in this age group, five times higher than among adults born in other years.

• Though reported rates of HCV in US populations are three times higher than that of the human immunodeficiency virus (HIV), Washington, DC (DC) has reported rates of 2% for HCV and 2.6% for HIV.

• We hypothesized that HCV testing in a large, urban primary care clinic, regardless of ascertainment of risk factors, will reveal higher rates than those previously published in DC and in the US.

METHODOLOGY

• Beginning December 2012, a HCV testing program was established in the Primary Care Clinic at MedStar Washington Hospital Center, with CDC grant funding (HepTLC). The aim was to sequentially test in this BC, link directly to care with Infectious Disease or Gastroenterology, and create a sustainable testing program.

• Eligibility includes: born between 1945-1965, without predetermined risk factors in the electronic medical record, and not previously HCV tested or positive. HCV antibody positive patients were linked to care regardless of RNA status to receive either further testing and evaluation, or if RNA negative, health education and counseling.

• Data are reflected for testing through February 14, 2014.

• Testing Flow Sheet:

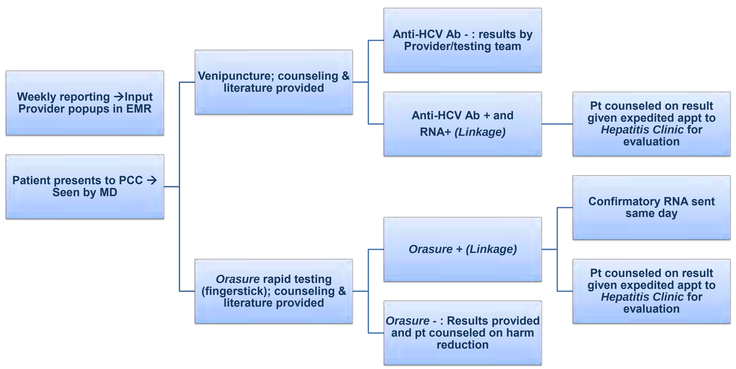
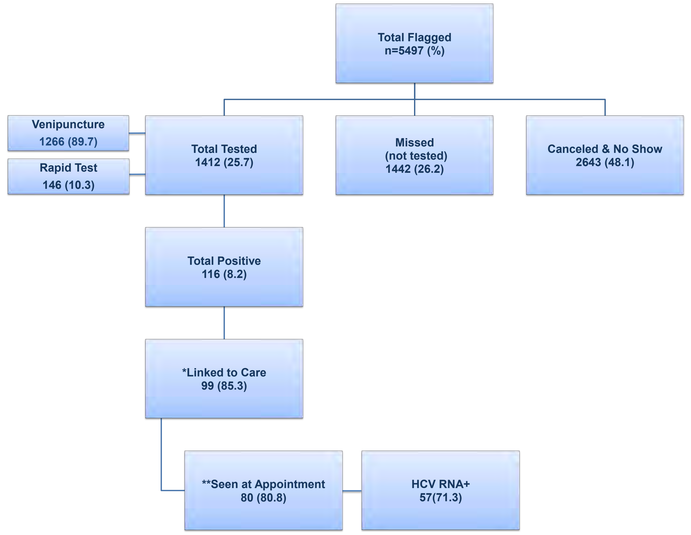


Table 1: Patient Characteristics (12/10/12 – 02/14/2014)

	Tested Birth Cohort	Total HCV Ab+	Intragroup HCV Ab+
	(n=1412) (%)	(n=116) (%)	116/1412 (8.2%)
Mean Age ± SD	58.7 ± 5.7	60.0 ± 4.9	
Gender			
Men	485 (34.4)	66 (56.9)	66/485 (13.6)
Women	927 (65.7)	50 (43.1)	50/927 (5.4)
Race/ Ethnicity			
Black or African American	1237 (87.6)	107 (92.2)	
B/AA Men	411 (33.2)	58 (54.2)	58/411 (14.1)
B/AA Women	826 (66.8)	49 (45.8)	49/826 (5.9)
White, non-Hispanic	105 (7.4)	3 (2.6)	3/105 (2.9)
American Indian or Alaskan Native	19 (1.4)	3 (2.6)	3/19 (15.8)
Asian	16 (1.1)	2 (1.7)	2/16 (12.5)
Insurance			
Public	844 (59.8)	87 (75.0)	87/844 (10.3)
Private	568 (40.2)	29 (25.0)	29/568 (5.1)

Table 2: MWHC HepTLC Testing Data



*Number of patient appointments with either Infectious Disease or Gastroenterologist, regardless of RNA status
**Number of HCV Ab+ patients seen by both Infectious Disease and Gastroenterology

RESULTS

• As of February 14, 2014 8.2% (116 persons) of the 1,412 tested were found to be HCV infected.

• Of those *tested*, 65% were women, 57% HCV Ab+ were men, and mean age was 60 years. Of those HCV Ab+, 34.5% reported a history of IVDU at first appointment with a specialist.

• Those infected were more likely to be men (OR 2.8 [CI_{95} 1.8-4.1]) and persons with public insurance (OR 2.1[CI_{95} 1.4-3.3]) than in those un-infected.

• Approximately 88% of those tested and 92% of those HCV Ab+ were black/African American (b/AA). Overall, 13.6% of all men tested were HCV Ab+, of which 11.9% were both HCV Ab+ and b/AA. Of all b/AA men tested, 14.1% were HCV Ab+. This prevalence is statistically greater than the 8% reported by the CDC ($p<0.001$).

• Of the 5,497 eligible patients, 48.1% either cancelled or no-showed for their appointments, 25.7% were tested, and 26.2% were not tested, though they did show for their appointments, and are considered as missed opportunities.

• The first appointment adherence rate for those HCV infected was 80.8% compared to an overall primary care clinic appointment adherence rate of 52.1%.

CONCLUSION

• The HCV prevalence rate of 8.2% in this Washington, DC urban clinic is significantly higher than both the previously reported CDC rate of 3.25% in the BC ($p<0.001$), and the overall reported rate of 2% in the District of Columbia ($p<0.001$). Since inception of the grant, rates have ranged between 7.8% – 10.0%.

• Limitations are: (1) Data and risk factors are collected from the EMR which often contains incomplete information. Thus, risk-factor comparisons cannot be made between those infected and not infected in this BC testing. (2) As this population was largely b/AA, comparative conclusions cannot be drawn regarding race. However, these rates are very high in the b/AA community, especially amongst b/AA men and need further evaluation and attention.

• In comparison to HCV rates amounting to 14.1% in b/AA men at this center, HIV rates in DC at the end of 2011 were reported at 5.4% in b/AA men. These alarming statistics highlight the need to engage more men into harm reduction, transmission reduction and medical care.

• One of the aims of this program is to create sustainability. One measure toward achieving this goal is to utilize venipuncture for testing, which is covered by insurance. Another measure toward sustainability is the need to address missed testing opportunities as rates were equivalent to those tested.

• Given these high prevalence rates in those without ascertainment of risk factors, and with an improved therapeutic cure on the horizon, testing initiatives need to become standard of care and maintained as sustainable models.

Author Disclosures:
Dawn A. Fishbein has served on an Advisory Board for Boehringer Ingelheim