

Effectiveness of a hepatitis C group education class in Veterans Administration treatment settings

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Rationale for Hepatitis C Education

- | Prevention of secondary transmission
- | Improve patient care
- | Improve clinic efficiency
- | Promote interpersonal learning
- | Improve quality of life



Hepatitis C Patient Education

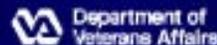
PURPOSE: To determine the effect of a patient group education class on veterans' knowledge about their hepatitis C infection

METHOD:

- Participants: patients referred to GI/Hepatology
- Attended 1-hour class taught by an ARNP or MD
- Format of the class: PowerPoint presentation

HCV PowerPoint Presentation

Welcome to the Hepatitis C Education Class



Hepatitis C

- Identified in 1989
- Blood test became available in 1992
- Used to be known as "non-A, non-B" hepatitis
- Spread through blood-to-blood contact
- **No vaccine available to prevent hepatitis C**

C



What Happens to People With Hepatitis C Virus?



Available at:
www.hepatitis.va.gov

Topics Covered in HCV Education

- | **Complications of hepatitis C**
- | **Ways to contract hepatitis C**
- | **Ways to decrease liver damage**
- | **Ways to stop spread of hepatitis C**
- | **Effective treatments for hepatitis C**
- | **Side-effects of interferon**

Hepatitis C Patient Education

- | **DESIGN:** Pre- and Post-test on hepatitis C knowledge
- | **ANALYSIS:** Compared HCV knowledge test scores:
 - Study 1: between patient groups with different baseline knowledge levels
 - Study 2: between different treatment settings using different educational methods

Hepatitis C Knowledge Test

- | **40 True or False questions**
- | **Content areas:**
 - **Symptoms & complications of HCV**
 - **Risk factors & prevention of secondary transmission**
 - **Treatment options & side-effects**
- | **Anonymous administration**
- | **Questionnaires at least 60% complete were included in analysis**

Hepatitis C Knowledge Test

Sample Questions

- | **Possible complications symptoms, or problems caused by Hepatitis C . . .**
 - **Edema (swelling of legs or joints) (T)**
 - **Problems thinking clearly (T)**

- | **To help stop the spread of Hepatitis C . . .**
 - **Do not share eating utensils (F)**
 - **Do not share razors or tooth brushes (T)**

Hepatitis C Knowledge Test

Sample Questions

- | Ways a person can get or spread hepatitis C to others include . . .
 - Playing with a child (F)
 - Tattoos (T)

- | To decrease the risk of liver damage, a person with hepatitis C should . . .
 - Not drink alcohol (T)
 - Avoid eating vegetables (F)

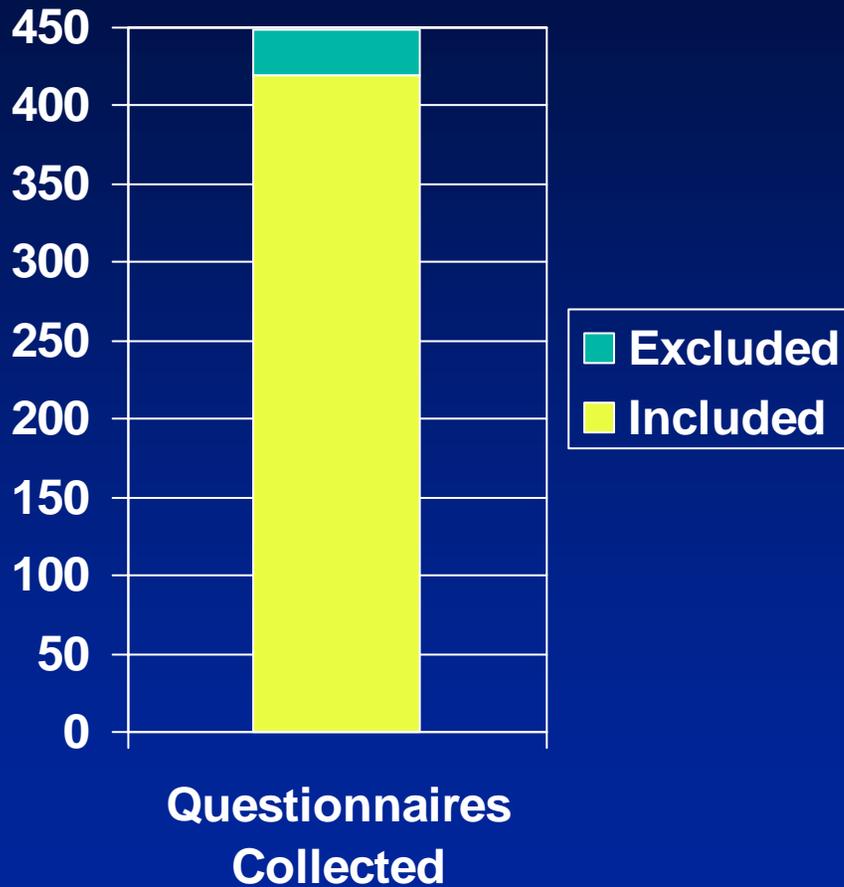
Hepatitis C Knowledge Test

Sample Questions

- | **Effective ways to treat hepatitis C include . . .**
 - Ribavirin with interferon (T)
 - Milk Thistle (F)

- | **Side effects of interferon include . . .**
 - Decreasing blood counts (T)
 - Depression (T)

Patient Demographic Data



- | 450 questionnaires collected

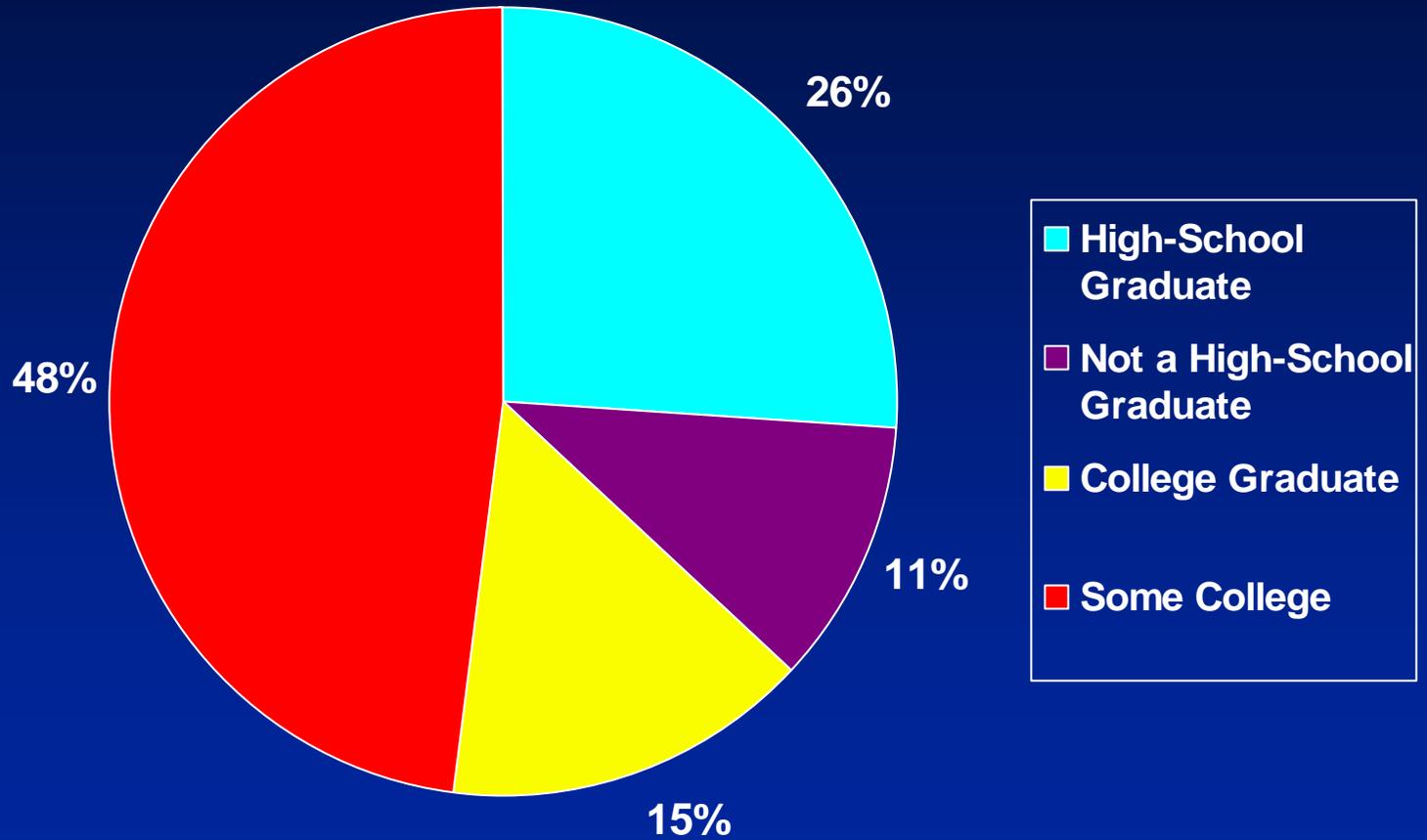
- | 31 excluded for incompleteness or no match

- | N = 419

- | Mean age = 50.7 yrs

- | 94% male

Education Level



Additional Demographic Data

Collected for a subset of 257 participants:

| Marital Status

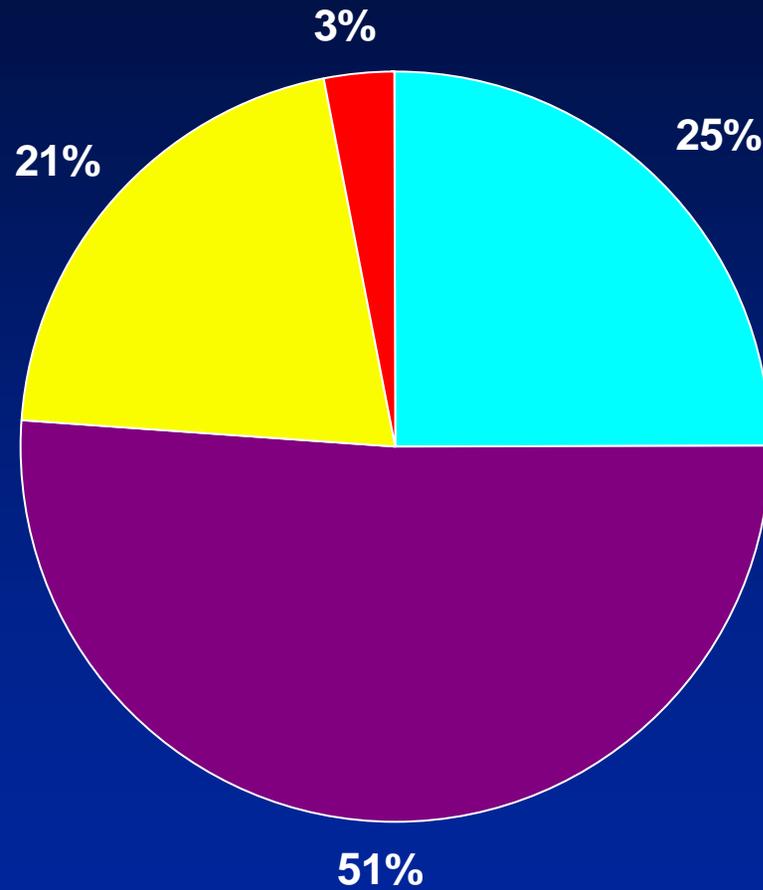
- 25% Married
- 51% Separated or Divorced
- 21% Single/Never married

| 69% lived within 30 miles of the VA

| 32% were homeless

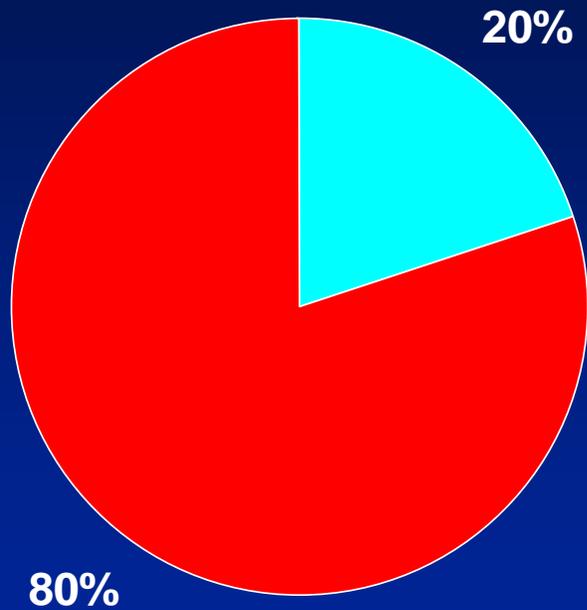
| 20% were employed for full- or part-time

Marital Status



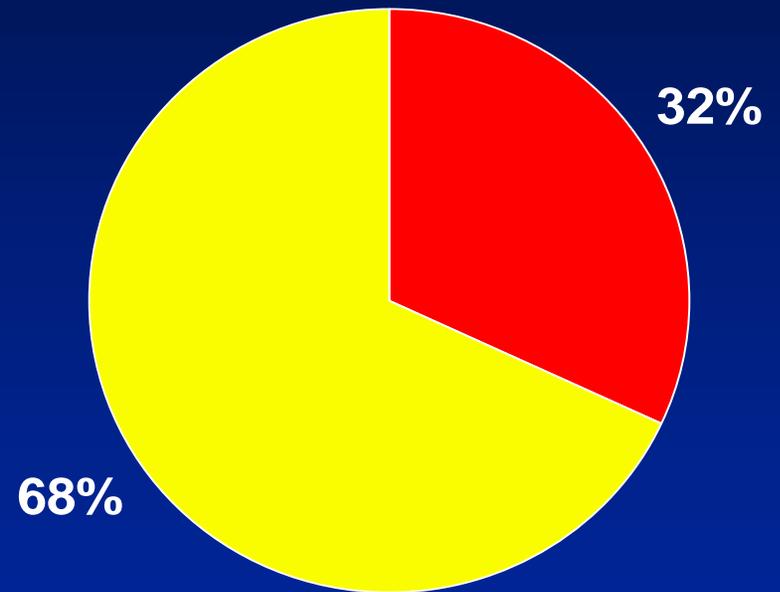
■ Married ■ Divorced/Separated ■ Never Married ■ Widowed

Employment



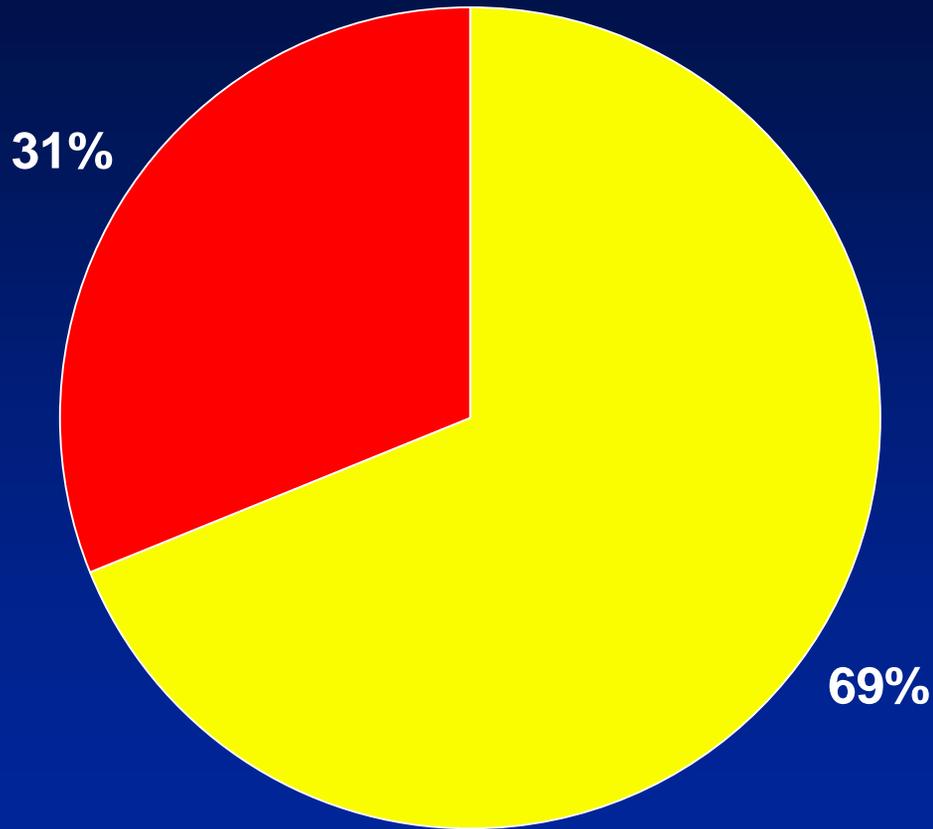
■ Employed Full or Part-time ■ Unemployed or Disability

Homeless



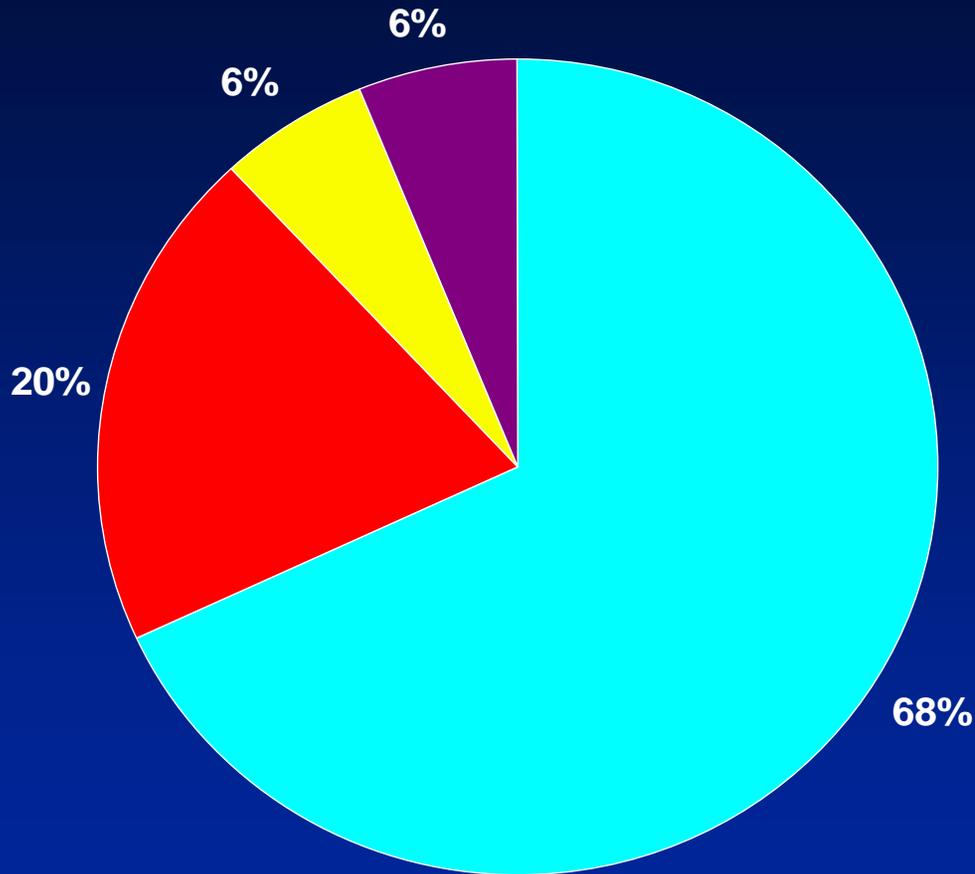
■ Yes ■ No

Distance from VA



■ Within 30 miles ■ Beyond 30 miles

Race



Non-white patients less likely to complete questionnaires than white participants

- chi-square = 11.0
- $p < 0.01$

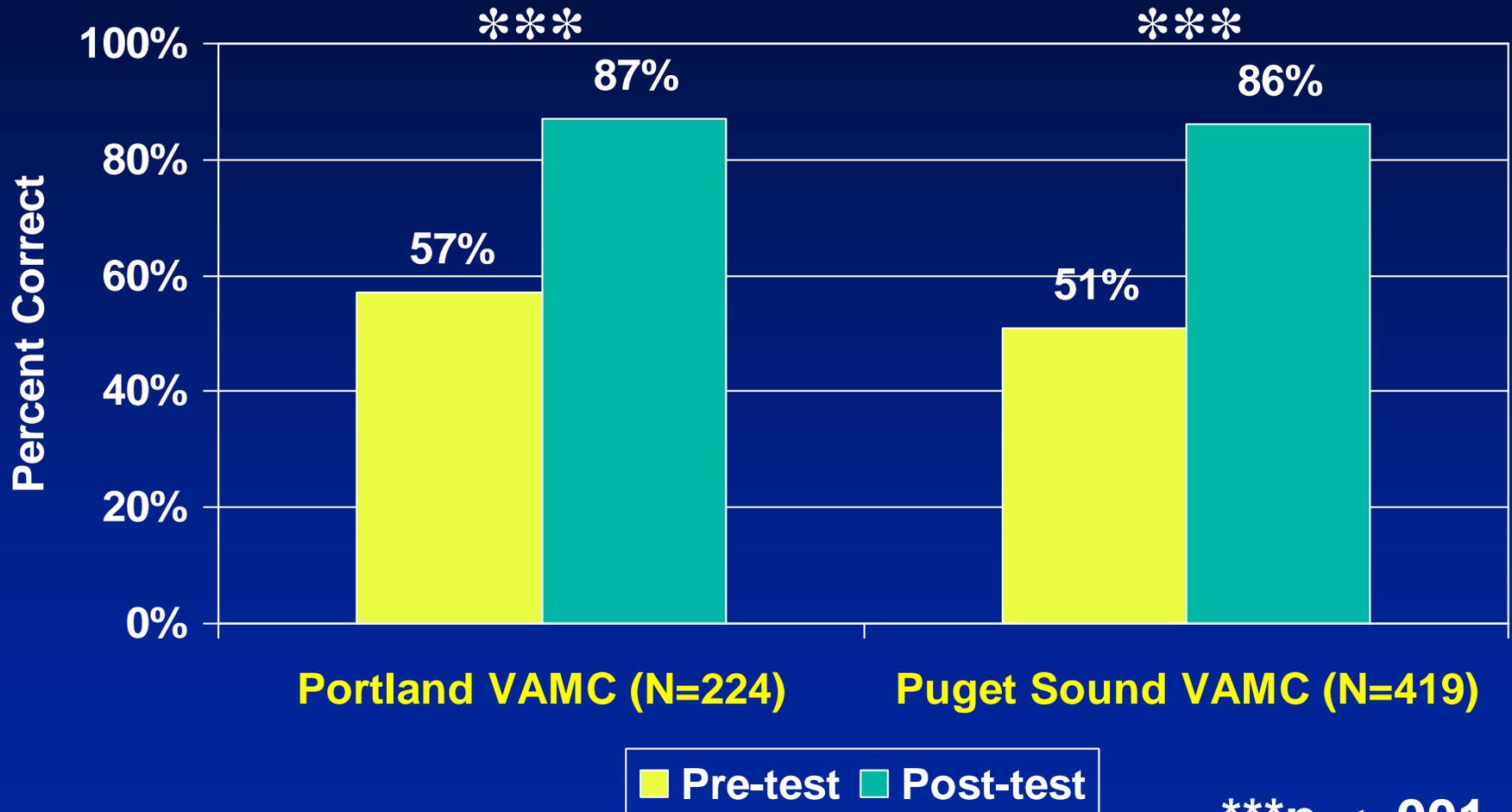
White

African-American

Hispanic

Other or Unknown

HCV Knowledge Test Scores



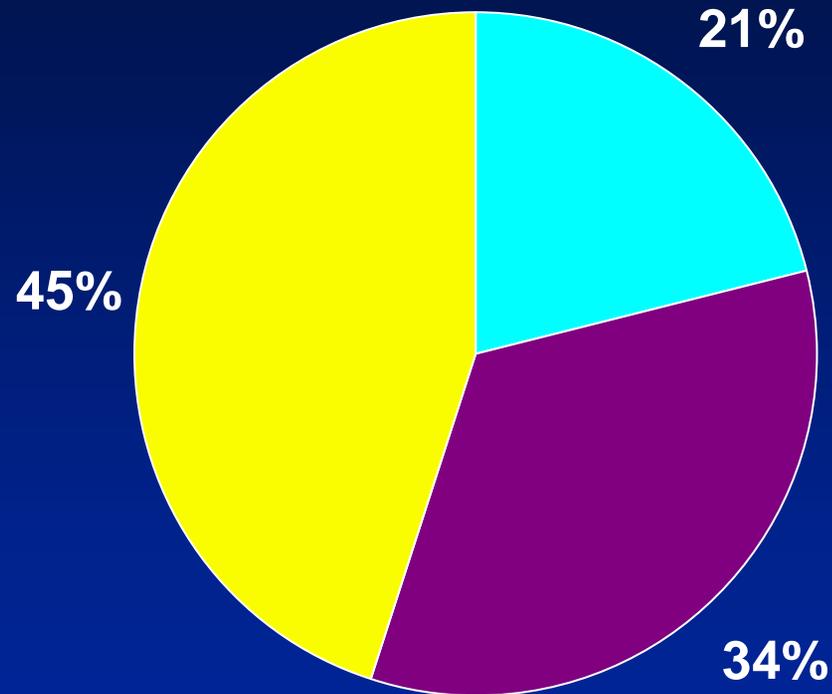
***p < .001

Source of prior education

Patients were divided according to source of prior HCV education:

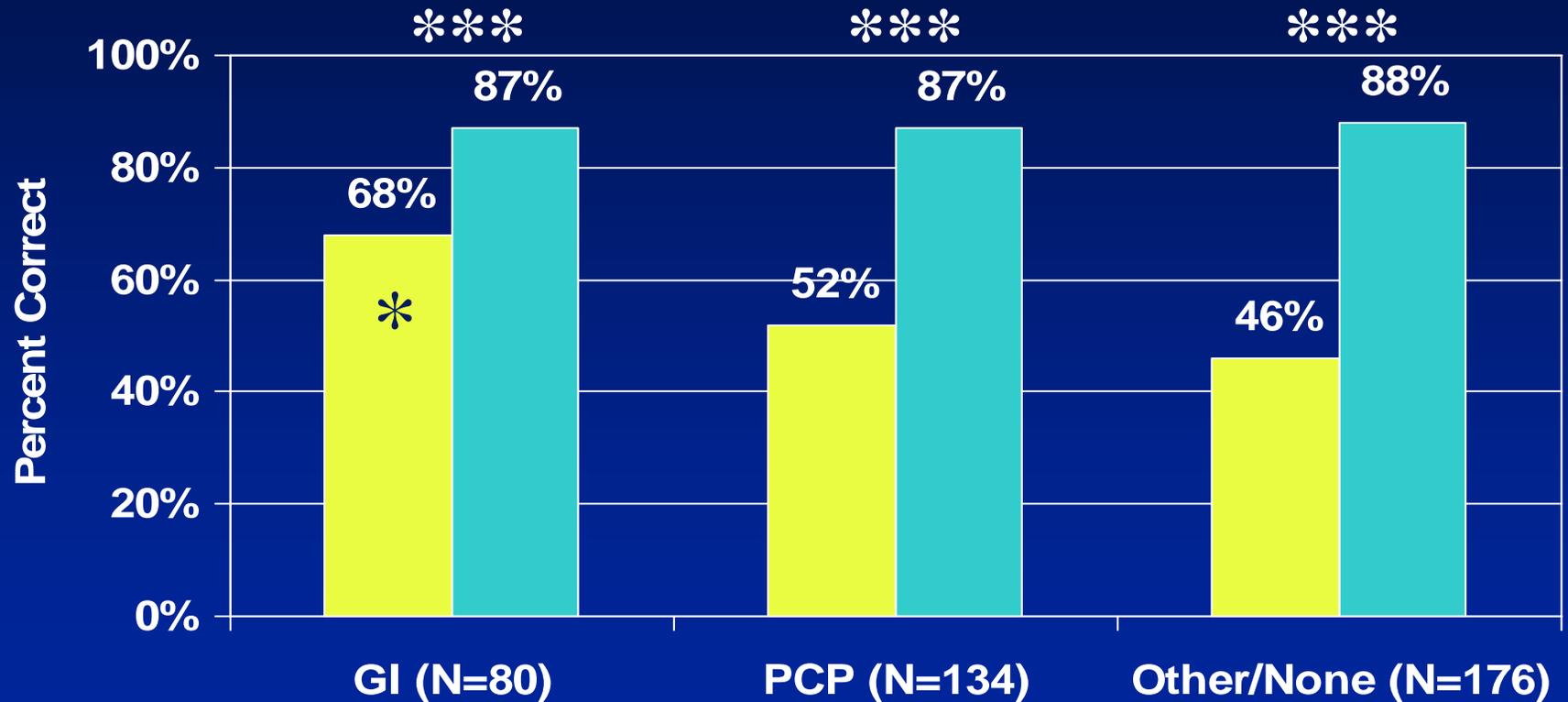
- | **GI** = Gastroenterologist or Hepatologist
- | **PCP** = Primary Care Provider
- | **Other/None** = another source, or no previous HCV education

Source of Prior Education



■ GI ■ PCP ■ Other/None

Scores Grouped by Source of Prior Education

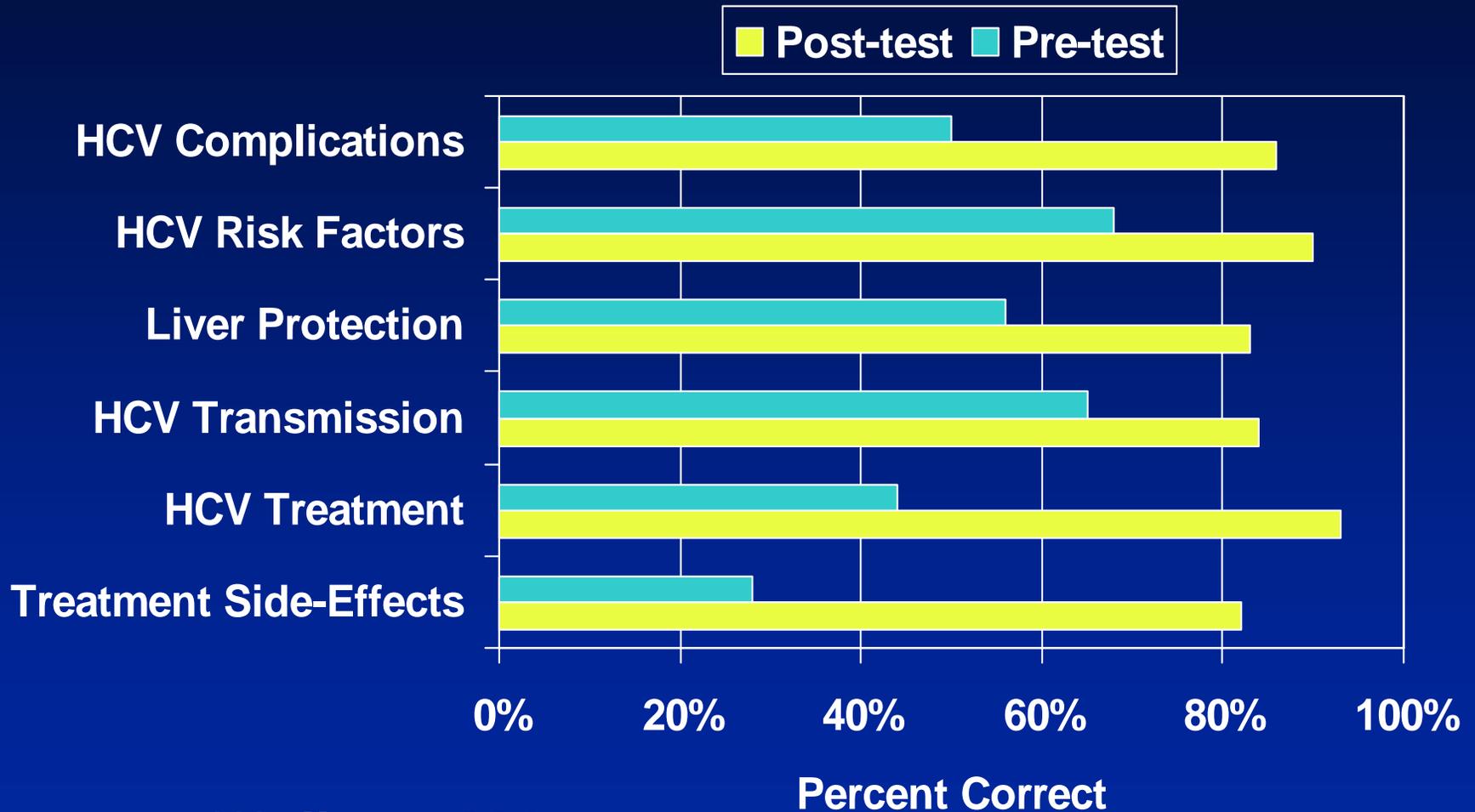


*GI > PCP, Other/None
on pre-test ($p < .0001$)

■ Pre-test ■ Post-test

*** $p < .001$

HCV Knowledge Area Subscales^{***}



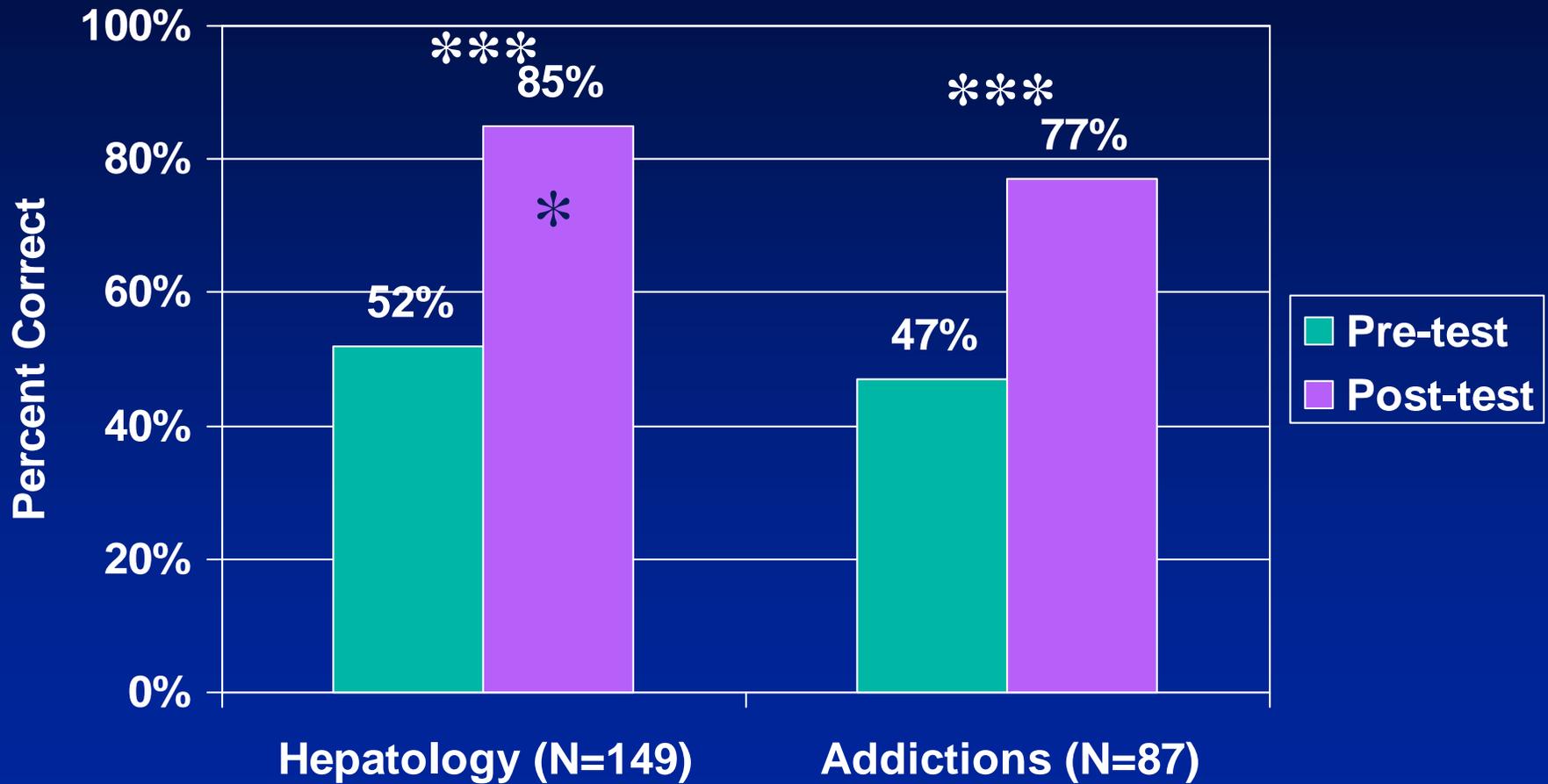
***all p < .001

Study 2:

Hepatology & Addictions Clinic

- | 149 GI/Hepatology Education Class patients compared with 87 Addictions Clinic patients
- | Addictions Clinic HCV Education taught by nurse practitioner
- | PowerPoint presentation not used in Addictions Clinic
- | Addictions Clinic class more interactive

Hepatology & Addictions Clinic: HCV Test Scores



*Hepatology > Addictions on post-test ($p < .0001$)

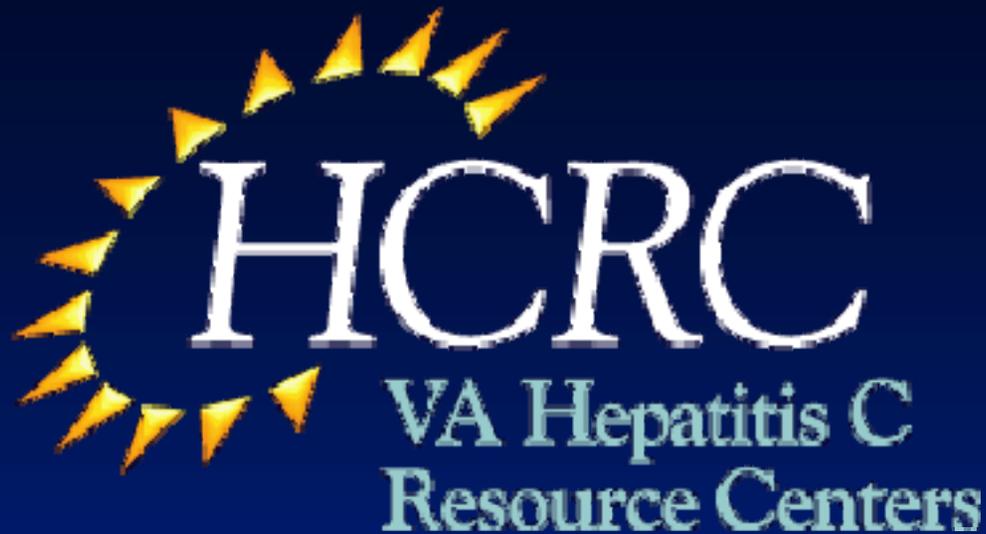
*** $p < .001$

Hepatology & Addictions Clinic: Results

- | Both classes significantly improved HCV knowledge ($p < .001$)
- | On pre-test: no significant knowledge difference between Hepatology & Addictions patients
- | On post-test: Hepatology patients scored significantly higher than Addictions ($p < .0001$)
- | Limitation: Different class format confounded with different patient population/setting

Conclusions

- | Hepatitis C patient education class is an effective teaching method for HCV+ veterans
- | All groups showed a knowledge increase, regardless of the source of their previous HCV education (GI, PCP, Other)
- | HCV patient education class can be adapted successfully to other settings and populations
- | Efforts to improve patient knowledge may have substantial impacts on prevention and quality of life



**Hepatitis C Education Class PowerPoint available
at the VA Hepatitis C Resource Center table
and at:**

www.hepatitis.va.gov