Barriers to Papanicolaou Screening among HIV-Infected Women: a cross sectional survey

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Adults and children estimated to be living with HIV - 2013

- North America and Western and Central Europe: 2.3 million (2.0 million – 3.0 million)
- Middle East & North Africa: 230,000 (160,000 – 330,000)
- Sub-Saharan Africa: 24.7 million (23.5 million – 26.1 million)
- Eastern Europe & Central Asia: 1.1 million (980,000–1.3 million)
- Caribbean: 250,000 (230,000 – 280,000)
- Latin America: 1.6 million (1.4 million – 2.1 million)
- Asia and the Pacific: 4.8 million (4.1 million – 5.5 million)
Background on HIV/AIDS

- 35 million people live with HIV worldwide
  - 46% women

- 1.15 million individuals in the United States
  - 26% are women
Background on HIV/AIDS

- 1.5 million individuals died worldwide from AIDS in 2013
- 2.1 million individuals newly infected with HIV in 2013
Malignancy in HIV

- Increased risk of developing other disease
  - Malignancies
    - Cervical Cancer
      - Papanicolaou (Pap.) smear is the currently recommended method of screening
HIV/AIDS in our Population

- Tri-county Area (Clark, Mojave and Nye)
- 8,484 people living with HIV/AIDS
  - 1,371 (~16%) are women
- We work with women that receive care for their HIV/AIDS at the UMC Wellness Center
Study Objective and Design

- We sought to understand barriers to cervical cancer screening among HIV-infected women.

- Our cohort was 318 HIV/AIDS positive women in our university-affiliated outpatient clinic.
Methods

• Investigators contacted patients via telephone to complete an investigator administered 30-item questionnaire, 13 barriers questioned.

• 13 questions regarding potential barriers; some items asked:
  • Date of last Pap. smear
  • Perceived barriers to getting a Pap. smear
  • Preferred method of contact for making a Pap. smear appointment and/or getting a reminder
Phone Call Methodology

Attempt #1 (10am to 4pm)
- Reached
  - Survey Completed
  - Survey Not Completed
- Not Reached
  - Attempt #2 (evening or weekend)
    - Reached
    - Not Reached
      - Attempt #3 (evening or weekend)
        - Reached
        - Not Reached
Results

- 141 patients were reached and 77 completed the survey (completion rate=55%)

- 46% did not receive Pap. smears in the past year
Results

- Perceived barriers to receiving Pap. smears were found
  - Cost - 23%
  - Lack of insurance - 14%
  - Transportation - 12%
  - Comfort level with physician - 6%
Results

Among those that did NOT receive a Pap. smear within the last year, 45% reported that being contacted via text messaging would best aid them to come in more regularly.
Discussion

- No single perceived barrier is likely affecting cervical cancer screening rates among HIV/AIDS positive women
  - Rather a combination of factors

- This unique population deals with multiple medical and non-medical appointments related to their health

- Utilizing preferred communication methods for both scheduling and reminders is likely to increase screening rates among HIV/AIDS patients
How is texting being used internationally?

- Collectively known as “mHealth”
  - Appointment reminding and making
  - Emergencies and disasters
  - Medication adherence
  - Health education
“mHealth” in the Healthcare Setting

- Cincinnati Children’s Medical Center currently uses it throughout pregnancies; very positive outcomes

- Rural India

- Sub Saharan Africa mobile phone penetration in 2012 was 58%, expected to exceed 70% by 2015*
  - Initial data is promising, but more research needed

* Deloitte, 2012
Conclusion

• Automated text messaging is the preferred mode of contact for HIV-infected women in Southern Nevada

• Clinics should be flexible and strive to find innovative ways to match the needs of their patients
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