



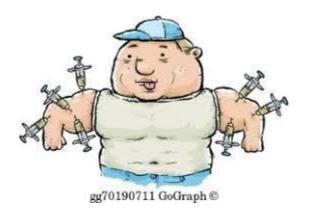






Mass Voluntary Viral Screening

Evaluating a Hepatitis C Case-Finding Model in an Irish Prison
Using Irish Red Cross inmate Volunteers for awareness raising and advocacy for testing

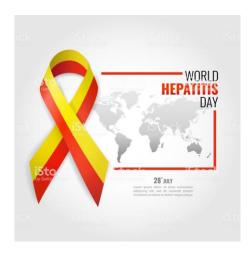


ERNA Luxembourg 8th-11th October 2019

Dr Graham Betts-Symonds

Programme Director, Community Health in Prisons

Global Pole of Expertise for Community Based Health in Detention







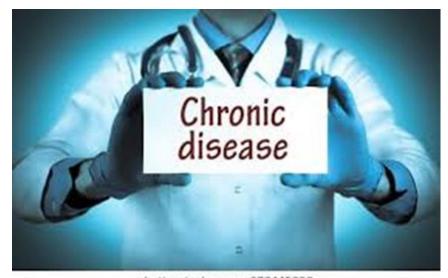






A Priority in European Prisons

The Identification,
Treatment and Prevention
of Hepatitis C in Prison
Populations is a Public
Health Priority



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An Epidemic of Significant Proportions

World wide

Hepatitis C A Major Public Health Concern

Leading Cause of Liverrelated Morbidity and Mortality



Europe

5.6 Million (1.1% of the Population) living with Chronic HCV infection Prevalence in Prisons of 15.5%

40% of IDU Prisoners











Why there is a Poor Uptake of Screening

- There is poor uptake for screening from prisoners generally
- Prisoners are less likely to listen to professionals in prison
- Difficulty in prisoners admitting a history of IDU.
- Associated stigma
- Lack of awareness and understanding that Treatment is available.
- Fear from the older Interferon treatments

Hepatitis C



Of every 100 people infected with Hepatitis C, 75-85 people will develop Chronic Hepatitis C.

If left untreated:



60-70 PEOPLE
will develop
CHRONIC LIVER
DISEASE



5-20 PEOPLE
will develop
CIRRHOSIS
over a period of
20-30 years



1-5 PEOPLE
will die from
CIRRHOSIS or
LIVER CANCER

Red Cross Red Crescent Volunteers Peer Education Works







Within all Irish Prisons approximately 10% of all inmates are active Irish Red Cross Volunteers. They are available to Give First Responder First Aid



Awareness around Health and Disease Prevention













The Irish Situation

Prisoners are at Risk

600,000 people in prisons in

Europe



3,400 people in Irish Prisons in 13 Institutions including 1 female prison and 2 Open Prisons

Prevalence Statistics

- High rates of Opiate Use 50%
- Intravenous Drug Use 43%
- Hepatitis C Infection 13%
- HCV Infection amongst IDU 81%













The Mountjoy Prison Project Mass Voluntary Viral Screening

538 Inmates

Sentenced Male Prisoners

Known HCV Status <20%

Post Mass Screening Known Status 78%













A Whole Prison Approach to Viral Screening













Planning the Project

A Multi-disciplinary and 'Whole Prison Approach' (WHO 2007)

- Irish Prison Service
- Medical/Nursing Staff
- Prison Officers, Governors, Chief Officers
- Irish Red Cross
- Inmate Volunteers
- IRC coordinators
- Counsellors
- Mater Hospital Hepatology Nurses
- HepCare Europe part EU funding
- Abbvie Pharmaceutical part funding















Red Cross inmate volunteers Learning and Planning for Action



Learning about hepatitis C prior to disseminating awareness and encouraging inmates to present for Screening





IRC inmate Volunteers planning their campaign









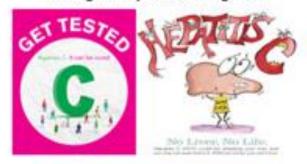




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Mass Voluntary Viral Screening Project

Testing for Hepatitis coming soon







Ask addiction nurse or kish Red Cross volunteer for more information











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Mass Voluntary Viral Screening Project



Testing for Hepatitis

coming soon







Ask addiction Nurse or Irish Red Cross Volunteer for more information











Mass Voluntary Viral Screening Project 3·days·¶ 12-days-

until-Hepatitis-testing¶

Monday-&-Tuesday-10th-&-11th-April



Ask-addictionnurse or Red-Cross-volunteerfor more information¶

until-Hepatitis-testing¶

April·10th·&·11th



information¶

for-more-











Hepatitis Testing



Tuesday
Wednesday 20th &
21st June





Exit

Consent

Registration and

Questionnaire

Completion







Implementation



Treatment 1

Phlebotomy

Treatment 2

Phlebotomy



Prison officers continually feeding prisoners out back to cells.

Waiting area 6 prisoners at any one time

Entrance



538 population available for testing

- 13 excluded on mental health grounds
- 58 refused to participate
- 24 released before testing date
- 21 transferred to other prisons

Total of 422 Participated

78% of prison population



Campaign was over six 4 hour days

Prison officers continuously feeding prisoners into waiting area











Hepatitis Screening



Wednesday 31st May











The Results of Mass Voluntary Viral Screening

Analysis of Screening

- 422 Screened
- 404 (95.5%) had HIV screen Prevalence rate of 4%
- 403 (95.5%) had HBV & HBC screen with prevalence rate of 3% and 4% respectively
- Of the 92 HCV positive cases, 11% were co-infected with HIV and 6% with HBV
- History of IDU had HCV prevalence of 79.7%

Case-Finding of Untreated HCV Infection



The outcome of screening reflected an untreated chronic HCV infection prevalence of 13.2% amongst 403 prisoners tested.











How Many New Cases of HCV Were Detected?



Of 403 prisoners screened for Hepatitis C, 19 new cases were found. This means that 19 cases can be channelled into treatment regimes 19 prisoners no longer infecting other people in prison or on release











Health Economics of the Project

Identifying the Life Time Costs of a Chronically infected HCV Case



- A simulation is made with one person in the first disease stage.
- The model then uses yearly probabilities of disease progression to work out the probability of being in each disease stage over time.
- This is then multiplied by the cost of being in each disease stage for a year.
- The result is the expected cost of HCV for a chronically infected person on average and includes costs for decompensated cirrhosis and liver transplant.











Health Economics - Doing the Maths

- Cost of Mass Screening: 30,443 Euro (includes all materials and human resource costs
- Cost of Treatment: Euro 9,000 per patient for a 12 week course
- Cost of Treatment for 19 cases: Euro 171,000
- Cost of Life Time Management of Chronically infected case per person: 216,000
- Lifetime Cost of 19 people NOT detected: Euro 4,104,000

Cost of Mass Screening, Treatment and Through care for 19 cases: Euro 410,443

Societal Cost Savings: Euro 3,902,557

19 People with Normal Quality of Life













Addressing Hepatitis C in Irish Prisons

A Replicable Cost Effective Model

































Thank you

Questions