

HEPATITIS VIRUSES AND HIV AMONG INJECTING DRUG USERS IN ISRAEL

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OPIOID ADDICTION AND RISK OF BLOOD BORNE INFECTIONS

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- Opioid abusers are at higher risk of developing blood-borne infections due to various factors:
- Reduced functioning of the immune system due to heroin and opioid effect on HPA Axis
- Injecting practices –infected syringes
- Unsafe sex habits and sexual promiscuity
- Negative life-styles
- Reduced use of medical services

OPIOID ADDICTION AND RISK OF BLOOD BORNE INFECTIONS

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- Methadone/Buprenorphine long-term treatment has positive effect on HIV+ patients and slows down the progression of the disease, especially among non-street drugs abusers. (Pacifici et al, 2000).
- The risk of developing HIV disease is high among HIV+ opioid addicts without treatment
- Somaini et al, 2010-The cessation of heroin injection per se in a sample of opioid abusers reduced the R.R. to develop HIV from 1.78 to 0.66 , methadone treatment gave an additional protection with a further R.R. reduction 0.44. Further relapse or treatment cessation increased the morbidity rates.

Opioid Addiction in Israel

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- The number of opioid addicts in Israel is estimated around **15,000-20,000** people.
- The number of opioid addicts under Methadone/Buprenorphine maintenance treatment is **4,500**.
- There exist **14** treatment centers all around Israel.
- Methadone treatment was first introduced in Israel in **1967** and Buprenorphine in **2002**.
- **2013**-Buprenorphine/Naloxone combination has been included in the health technologies basket in order to reduce the risk of injecting abuse.

OPIOID ADDICTION IN ISRAEL

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- The government-run Centers have adopted an **integrative approach** which includes:
- Medical assessment, treatment and follow up
- Baseline Lab tests, including HIV, HBV, HCV, VDRL blood tests and periodical follow-up every 6 months-1 year.
- Baseline Chest-X Ray to rule out TB infection
- Referral to family physician when needed
- Hepatitis A and B vaccination promotion
- Random urine tests for drugs detection
- A.S.I at baseline and once a year follow up (recently introduced)

OPIOID ADDICTION IN ISRAEL

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- Group psychotherapy-CBT/DBT
- Relapse prevention groups
- 12 STEPS, N.A. self-help groups
- Psycho-social interventions
- Psychiatric consultation in case of dual pathology
- Health promotion initiatives (healthy life-styles, smoking cessation, safe sex)
- Referral of HIV+ patients or HCV patients to Hospital out-patient centers for specific treatment-

We found a positive correlation between treatment adherence and length of methadone treatment and compliance with infectious diseases treatment.

Not enough patients are actually treated for hepatitis C infection due to lack of knowledge, problems with HMOs funding, lack of adherence, side-effects .

National Case Registry

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- The Department for the Treatment of Substance Abuse at the Ministry of Health has created in **1990** a **National Case Registry** of all patients treated in Methadone Maintenance Centers
- The National Case Registry systematically collects :
- **Demographic variables** (age, gender, country of origin, education, employment, immigration date, family status and more)
- **Clinical variables** (physical diseases, medications, mental disorders, handicaps, blood tests results..)

NATIONAL CASE REGISTRY

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- **Addiction variables** (Severity of addiction, injecting habits, type of substances abused , alcohol abuse, poly-drug abuse, previous detoxifications, onset of drug use, street drugs use)
- **Information on Methadone/Buprenorphine dosages**
- **Variables on blood-borne infectious diseases** (blood tests results, date of blood tests, previous medical treatment, current treatment, compliance, hospitalizations)
- **Criminal record**

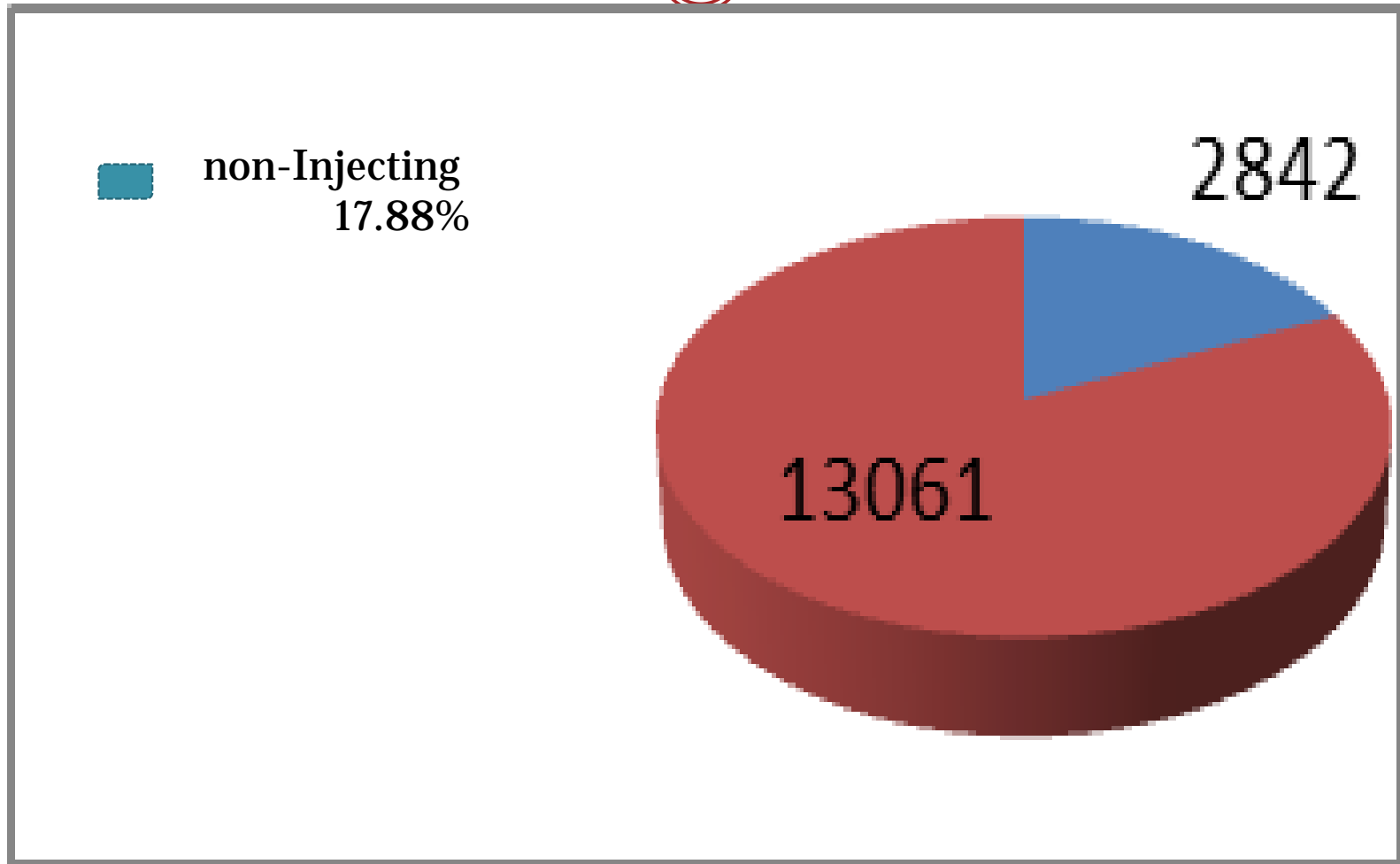
NATIONAL CASE REGISTRY

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- **Date of treatment entry, date of leave, cause of leave**
- **Date of death and cause(if known).**
- The Case registry is not yet on-line
- By the end of **2013** all patients database should be available on line.
- The Registry contains data on **15,903** patients ever treated in methadone centers since **1990, 80% males.**
- The population constitutes a **cohort of patients** and we are conducting a historical cohort study on blood-borne infectious diseases incidence , prevalence and effect of length of treatment, compliance, street drugs use, medication dosages and retention rate on morbidity and mortality from infectious diseases.

Injecting v. non-injecting

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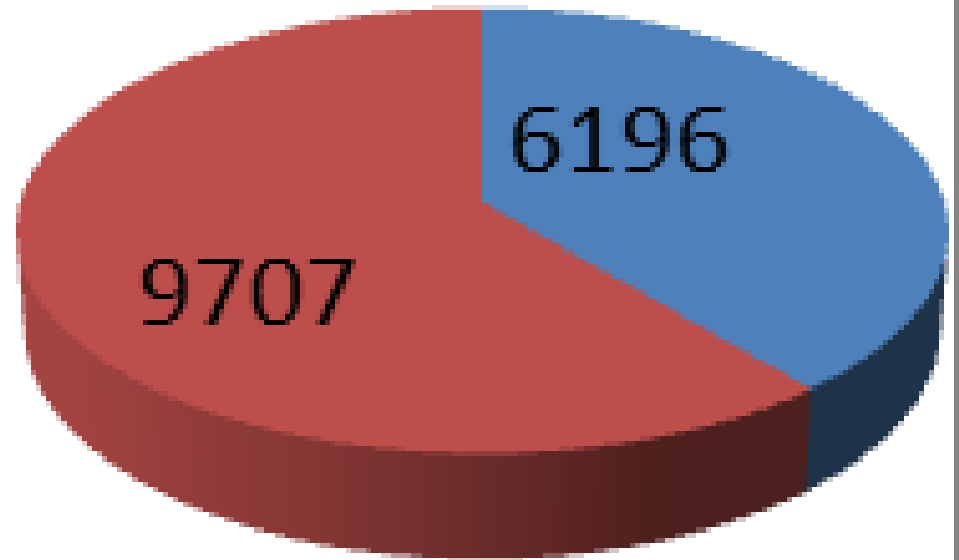


Poly-drug users v. non-users

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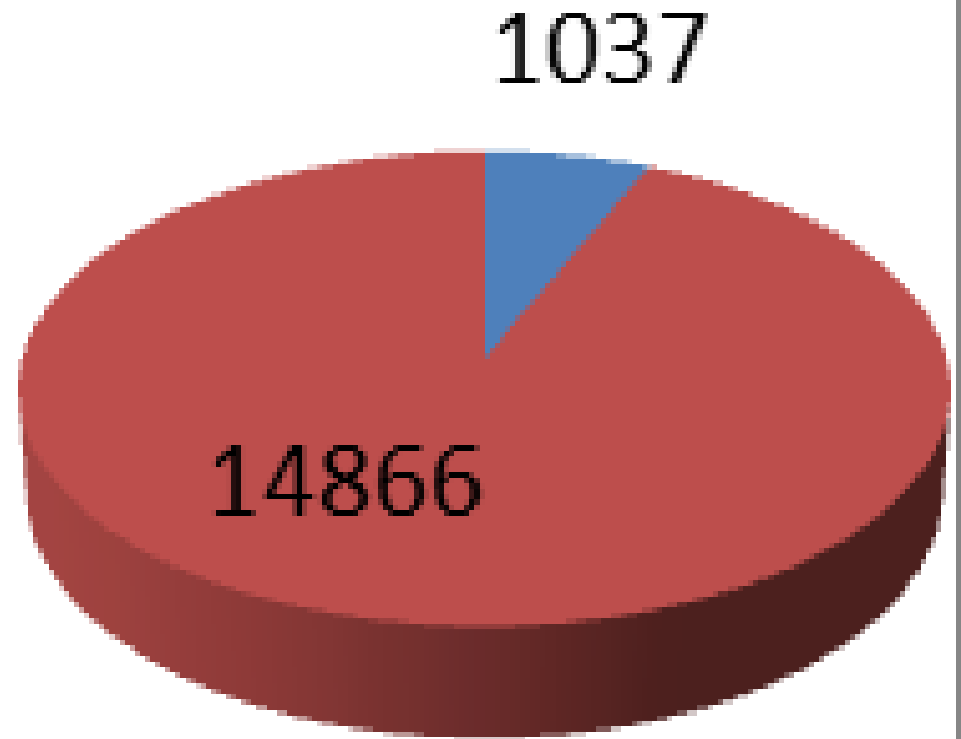
non users 38.96%
users 61.03%



Alcohol use v. non-use

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6.52% non- abusers
93.8% abusers



HIV Positive

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- **4.6%** of methadone patients are **HIV positive**.
- Positive patients are referred to District Health Services or to Hospital Specialist Centers and are carefully monitored.
- After a period of few new incidence cases few months ago it was registered an increase in new cases in the Tel Aviv area among injecting drug users.
- The epidemiological investigation revealed that it occurred a change in substance injected and modality
- Haghigat(Methamphetamine) and not heroin, with no heating requested, and the mutual sharing of the container and syringe.

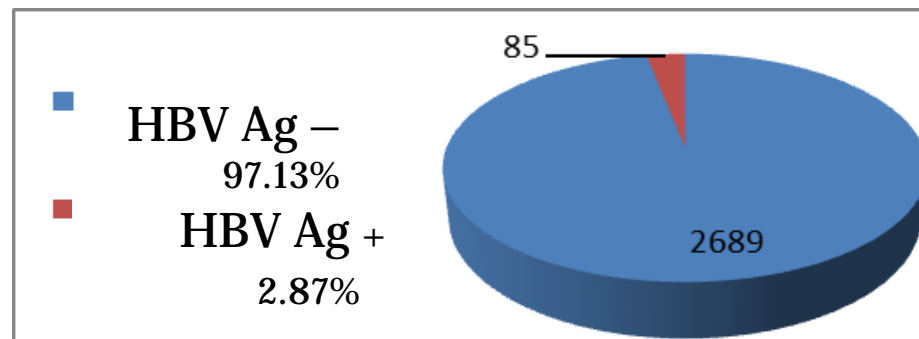
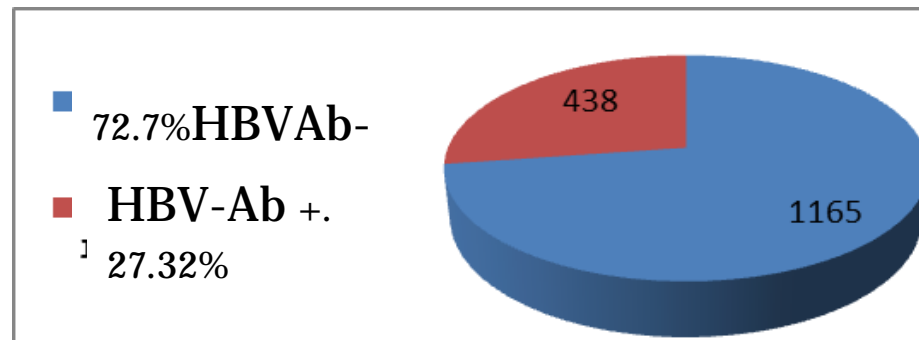
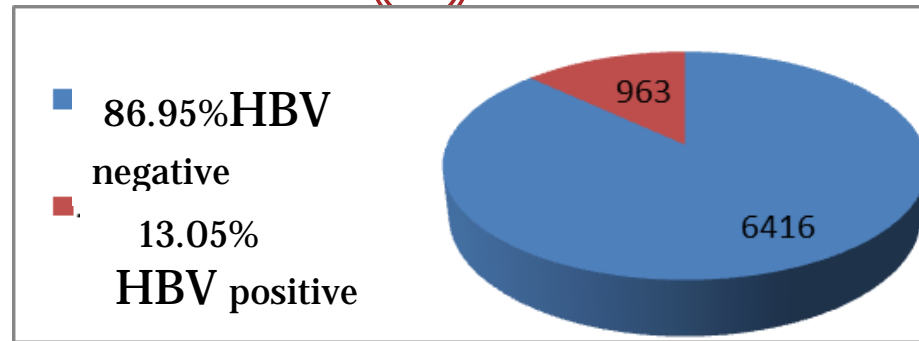
HIV Positive

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- In order to warn the patients and the staff a brief communication was spread to all treating centers syringe exchange programs ,Regional Health Districts by our Dept. and the Dept. for HIV and TB at the Ministry of Health .
- It was requested that all new cases should be communicated also to the Ministry in order to take due action
- It seems that the phenomenon has been contained.
- This kind of cooperation between different Services is advocated.

HBV DATA

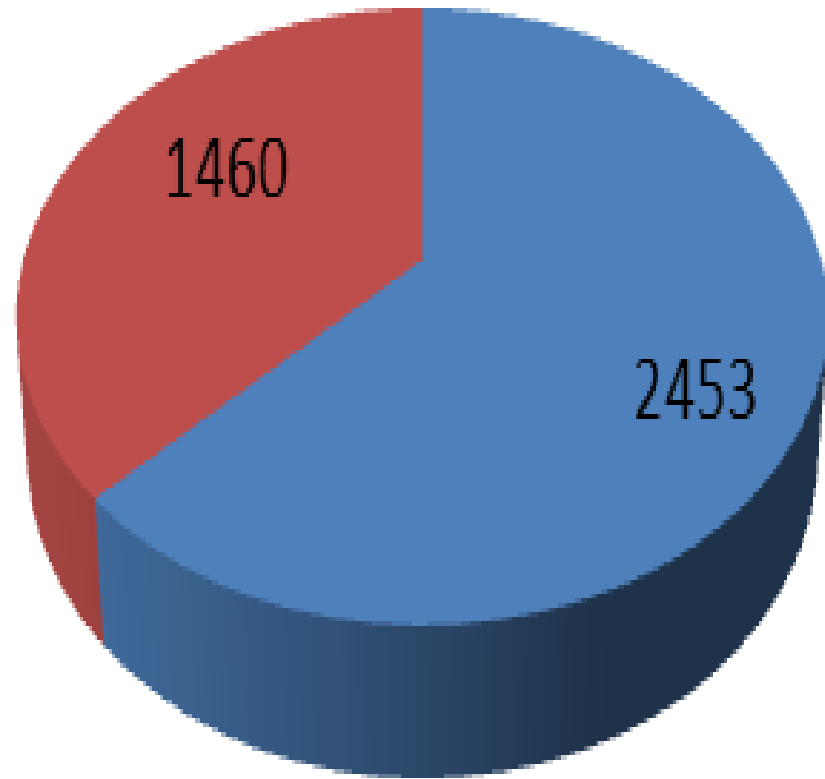
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HCV -Ab

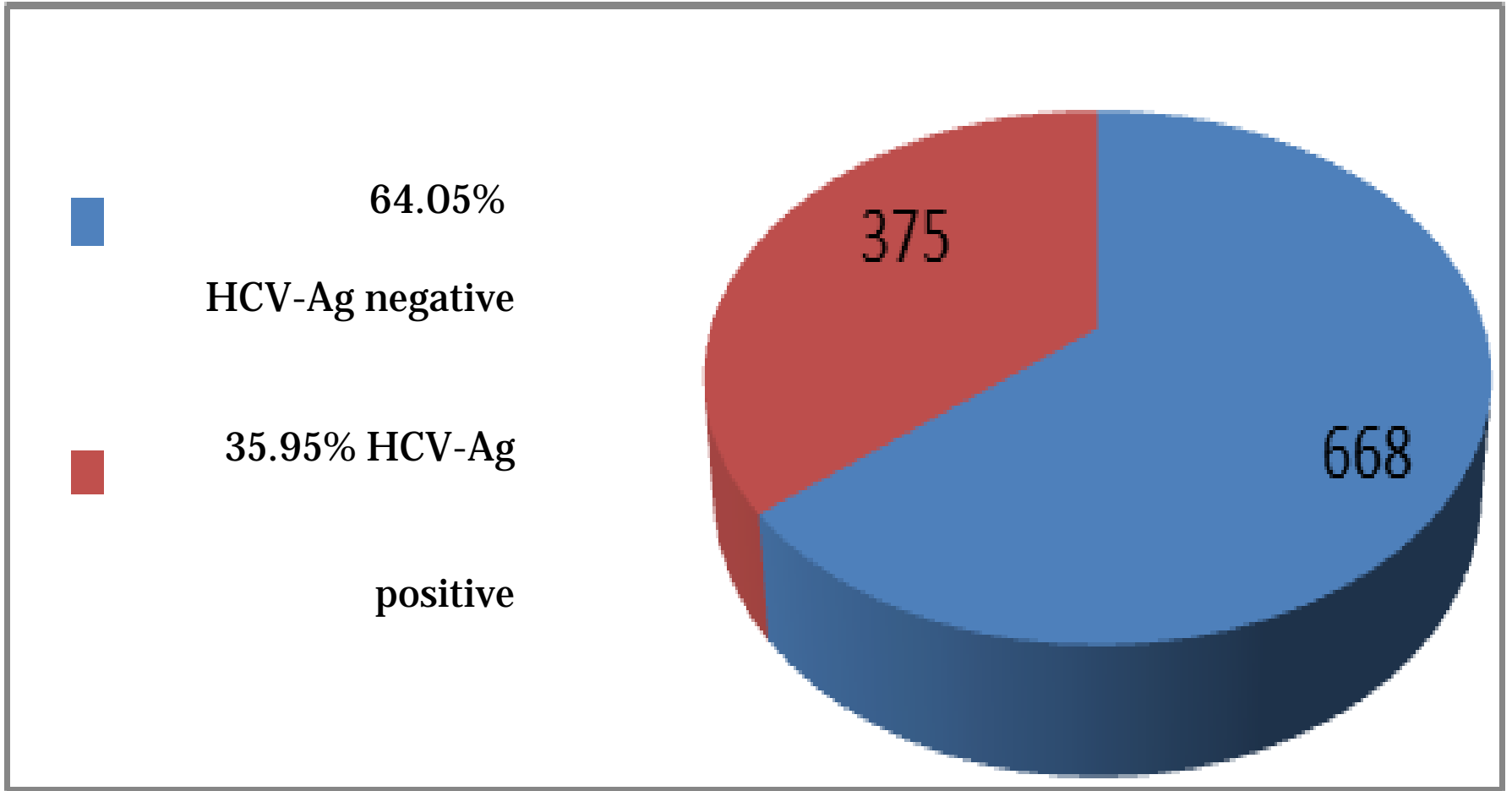
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- 62.68% HCV-Ab
negative
- 37.31% HCV-
Ab positive



HCV-Ag

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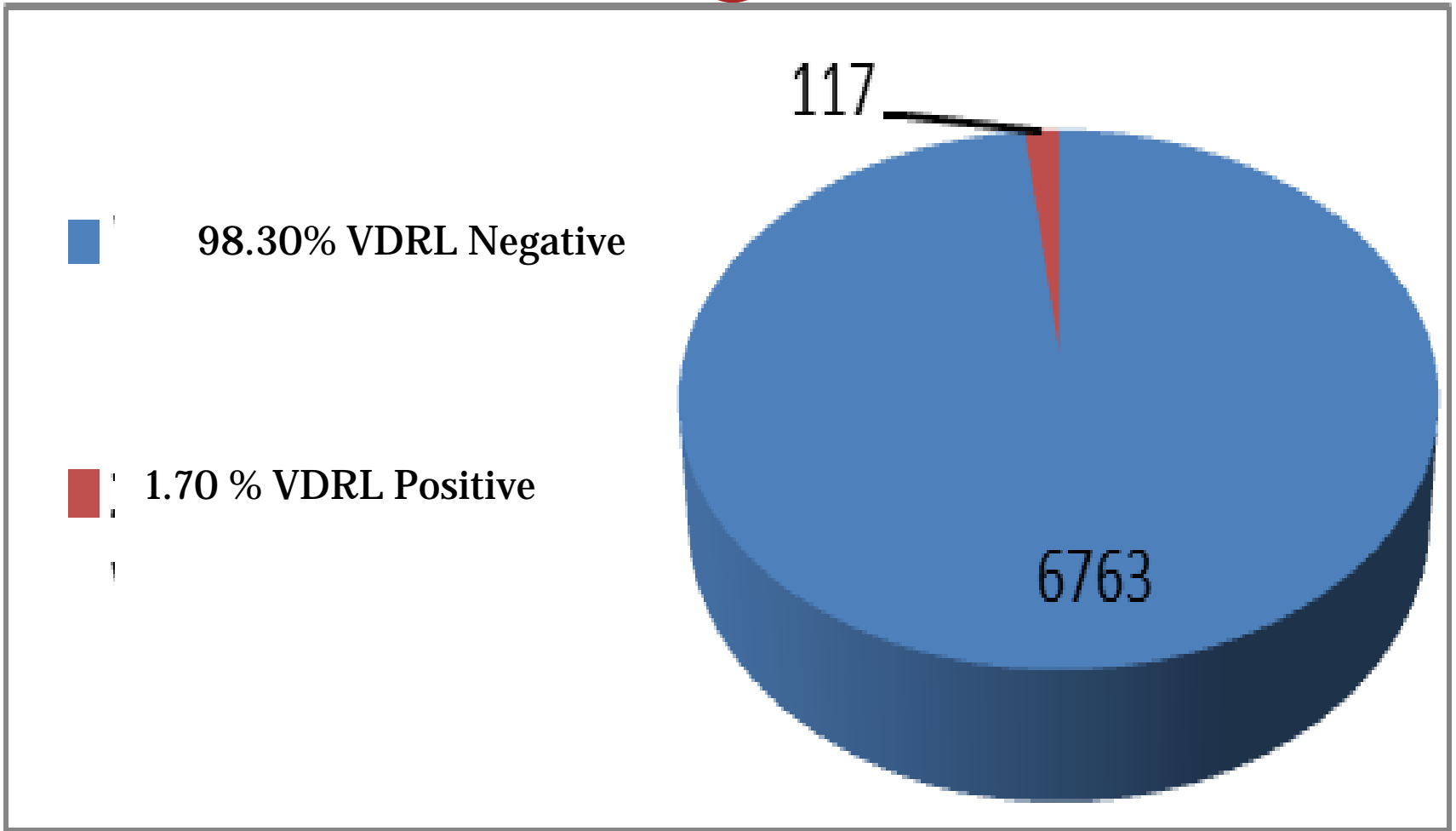
HCV

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- **HCV** infection is highly prevalent among injecting drug users around 60% in the literature.
- In our population its prevalence is around **40%**.
- In order to contain it various steps are taken:
- Health educational activities
- Periodical blood tests
- Prompt referral to Treatment Centers in various Hospitals
- **A new project was started with the help of “HETZ” self-help NGO, in cooperation with the IADA and the Ministry of Welfare-** short presentations for the staff and patients in order to increase their awareness and knowledge of the problem and referral to thorough diagnosis and treatment with no delay. Support and tutoring for those starting treatment.
- **We all believe that this important initiative will contribute to patients enrollment in treatment.**

VDRL

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SEP PROGRAMS

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- Harm reduction programs include also SEP activities.
- There exist **5** SEP programs: in **Tel Aviv, Haifa, Jerusalem, Beer Sheba and Ashdod.**
- The Tel Aviv Center works in cooperation with Lewinski Clinic, where the patients are assessed for infectious diseases. The activities include reaching-out in the streets and strategic areas in town.
- Sterile syringes are delivered in change of infected ones, together with condoms to enhance safe sex. Health prevention and promotion activities are performed. A non-judgmental attitude is used.
- Discretion is assured so that at the beginning patients are **anonymous**. Those who agree to start treatment are immediately accepted, either to detox inpatient center or to methadone maintenance center.
- They are encouraged to choose a family physician and to take care of wounds and skin ulcers when present.
- Most of the staff is volunteering. It includes medical staff, a nurse, social workers or students .Data on infectious diseases are also collected

Conclusions

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- The majority of our patients stop injecting drugs within the first month of treatment, a fact which reduces the risk for infectious diseases
- Well-stabilized patients and long-term patients show better compliance and adherence with infectious diseases treatment and have a better prognosis
- In order to improve patients knowledge on existing treatment for hepatitis C and its efficacy ,lectures and health promotion activities are delivered.
- Due to routine Chest X ray the prevalence of **TB infection** in our population is only **70** cases (**0.4%**).

CONCLUSIONS

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- In a previous study on all-cause mortality in our cohort of methadone patients compared with the general population the CMR rate was 12.2% higher than in the general population.
- Among the most frequent causes of death, from external causes **Infectious hepatitis** was n.3 after cancer and over-dose, while liver cirrhosis was n.6.
- This data call for **more intensive and targeted actions to promote early diagnosis** and detection of this disease and adequate and prompt treatment and follow up.
- The daily attendance to our centers ensures a good quality of care and medical attention to the general physical state of patients.
- Paradoxically this population receives better medical treatment than many others, a factor which seems to influence the incidence and prevalence of infectious diseases.

THE END

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- THANK YOU FOR YOUR ATTENTION

