



HBV **HCV** **HIV**

These blood borne virus are a
**THREE HEADED
MONSTER**

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We are running out of time to save the future of Pakistan

We are reminded of the old man who, upon returning home at night one day, was seen searching for his missing gold ring under the glow of a street light. When a passer by asked him where he'd lost his ring, the old man replied that it may have slipped off his finger anywhere between here and way back there in the dark ally. "Then why are you searching for it only over here?" asked the passer by. "Because this is the only place where the street light shines," replied the old man. This is our situation in Pakistan today. We are looking for HIV only where it is convenient for us to look and not necessarily everywhere we SHOULD be looking.

An Impending Pandemic Disaster

- The ***potential*** for a huge ***pandemic*** is ever present
- **THREE blood borne viruses threaten National Security: Hepatitis C & B viruses and HIV**

Compared to

HIV

Transmission of Viral Hepatitis

Transmission Route	Hepatitis A	Hepatitis B	Hepatitis C	Hepatitis D	Hepatitis E
Food - Borne	Common	Never	Never	Never	Common
Fecal - Oral	Common	Never	Never	Never	Common
Water - Borne	Common	Never	Never	Never	Common
Raw Shellfish	Common	Never	Never	Never	Suspected
Intra-Institutional	Common	Common	Common	Common	Common
I.V. Drug Use	Infrequent	Common	Common	Common	Never
Transfusion	Infrequent	Common	Common	Common	Infrequent
Hemodialysis	Never	Common	Common	Common	Never
Sexual	Infrequent	Common	Infrequent	Common	Infrequent
Anal - Oral Contact	Common	Never	Never	Never	Infrequent
Oral - Oral Contact	Common	Infrequent	Never	Never	Common
Household	Common	Infrequent	Infrequent	Infrequent	Common
Mother to Newborn	Infrequent	Common	Infrequent	Common	Infrequent
	Common	Infrequent	Never	Suspected	

Common

Infrequent

Never

Suspected

Here is a summary of modes of transmission of hepatitis viruses and a comparison of these same modes of transmission with respect to HIV... we can clearly visualize the striking similarities. Notice that for HIV the sexual route transmission is a yellow triangle which stands for 'infrequent' ... This may appear as an error, but the fact is that compared to hepatitis B, at least, the sexual mode of transmission for HIV is not very efficient.

Relative efficiency of transmission by mode; Hepatitis B vs. Hepatitis C vs. HIV

Mode of Transmission	HBV	HCV	HIV
Sexual transmission	+++	+	++
Injection drug use	++	+++	+
Dirty needle exposures	+++	+	++
Blood transfusion	++++	++++	++++

Source: Dr. Barbara McGovern, Tufts University Med. Ctr.

Hepatitis pandemic (more HCV than HBV) in Pakistan is spreading like wild forest fire – est. 6% to 24% of pop. (18 million exposed, 8 million active infections) HIV is sure to follow

Sexual transmission efficiency of HIV is intermediate between that of Hep C and Hep B ... IDUs' transmission of Hep C is much higher than that of Hep B and even more so of HIV ... yet we are hung up in IDUs being the principal source HIV infection in Pakistan...

Estimates of hepatitis prevalence range between, 6-8 % of the rural population and 12-24 % of urban and suburban population. Prevalent widespread unsafe healthcare practices are causing worsening of the Hep C infection rate. Current estimates put around 18 million people having been exposed to Hep C and about 44 % of these individuals (8-9 million) are actively infected. In all metropolitan hospitals, almost half of the patients in medical wards are being admitted with complications of end-stage liver disease, such as cirrhosis of liver, bleeding esophageal varices or frank hepatic failure.



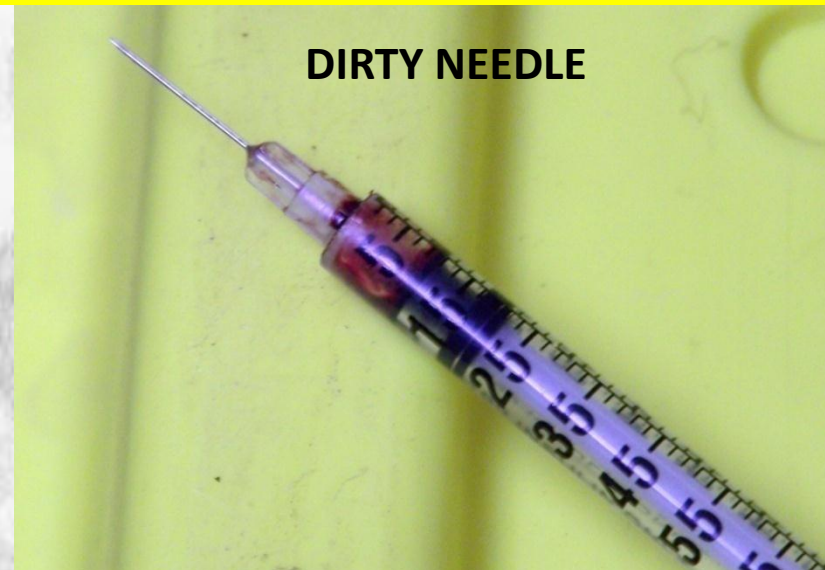
**8.5 injections per capita per year in Pakistan
i.e. 1,615,000,000 exposures ...**

In recent publications we've seen figures as high as 10 to 12 injections per capita per year for Pakistan, but here we use the lower reported estimates of 8.5

It is estimated that 90% of injections given are medically unnecessary as alternate (oral) routes of administration are usually adequate ... We have a huge perception problem in Pakistan where the patient as well as the health care staff feel that somehow injections are more effective than oral medication.

Injection safety is a very huge problem and it is almost unanimously recognized as the main driver of the disease for hepatitis, but no one talks about injection safety in the HIV context.

**About 80,000
Intravenous Drug Users**





Hundreds of MILLIONS of other potential EXPOSURES

It's not just therapeutic injections but also other invasive procedures where sterilization is not reliable

The image is a collage with a yellow background. It features several photographs: a large pile of discarded medical syringes and needles; a close-up of a syringe with a needle stuck in it; a child sitting in a pile of trash; and three children standing next to a bicycle with a large bag of waste attached to the front. A yellow banner with black text is overlaid on the top right of the collage.

A tragic reality: The Garbage Scavenger children

The re-cycling of used injection syringes and needles in Pakistan is a prolific cottage industry controlled and run by a vast mafia that employs armies of poor children

**Old style reusable syringes are STILL
used in many rural areas of Pakistan**



**Used syringes and needles are retrieved from
Waste dumps and processed for re-use...**

This factoid needs a moment's reflection

**8.5 injections per capita per year in Pakistan
i.e. One Billion Six Hundred Million exposures**

We are creating a PLAGUE of devastating proportions ... In terms of Hepatitis, particularly Hep C the plague has already reach staggering proportions and if we keep at it we could reach sub-saharan Africa levels of HIV infection in a decade or more.



The Plague Doctor

NIH, Pakistan, June 2009 report.

“HIV/AIDS Outbreak Investigation, at Jalalpur Jattan, Gujarat.”

Risk factors -- study subjects were exposed to:

- **96.2%** had received injections during ‘medical treatment.’
- **96.4%** of women had nose or ear piercing
- **40%** of the group had dental procedures done
- **15%** had received a blood transfusion
- **ONLY ONE** was an intravenous drug user

In response to these findings a general population survey of the whole district should have been conducted... Say, 10,000 individuals should have been screened and a nation-wide alert should have been issued to every general practitioner in the country to be on the lookout for suspected cases... But nothing of the sort happened. Instead there was total silence and in fact the Punjab AIDS Control program’s management at the time actively tried to silence those voices that raised this issue... WHY?

**1 ONE NEEDLE,
ONE SYRINGE,
ONLY ONE TIME.**



Safe Injection Practices Coalition
www.ONEandONLYcampaign.org

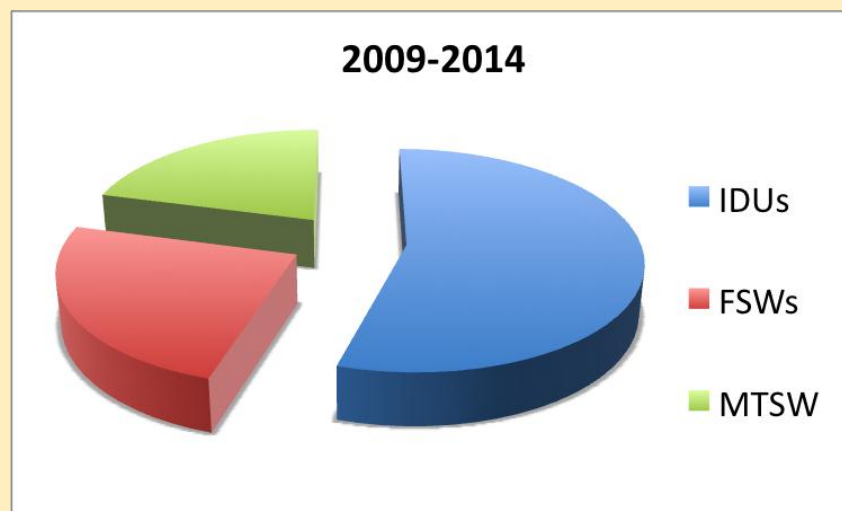
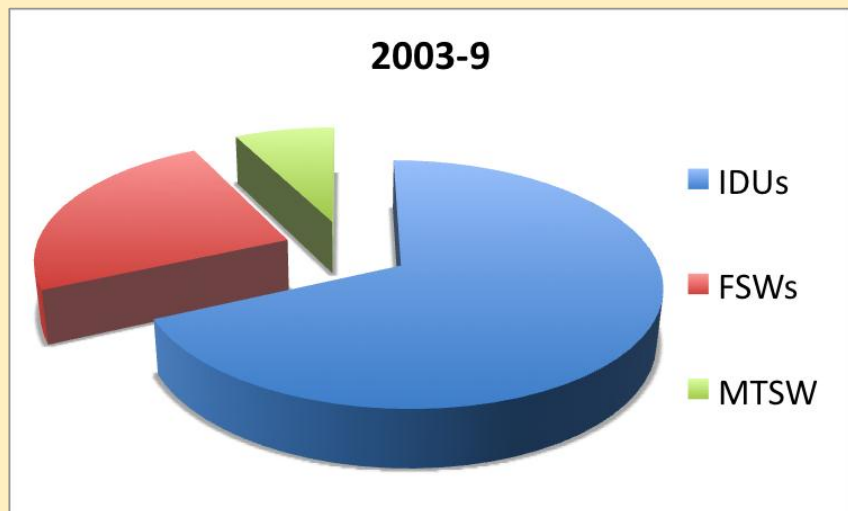


How much of the millions of dollars allocated for HIV control were spent to address injection safety? The answer, dear reader, is ZERO... No one was interested in looking at this issue... And THAT is the reason why the authorities did not want to hear about the Jalalpur findings either.

Where the AIDS Control budget was spent?

Resource allocation by Provinces

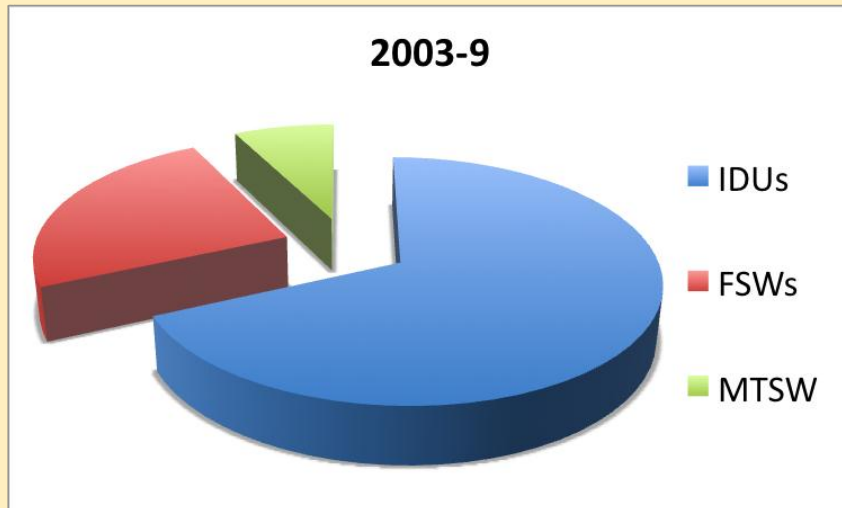
Proportion of HIV budget spent on different groups in four Provinces combined



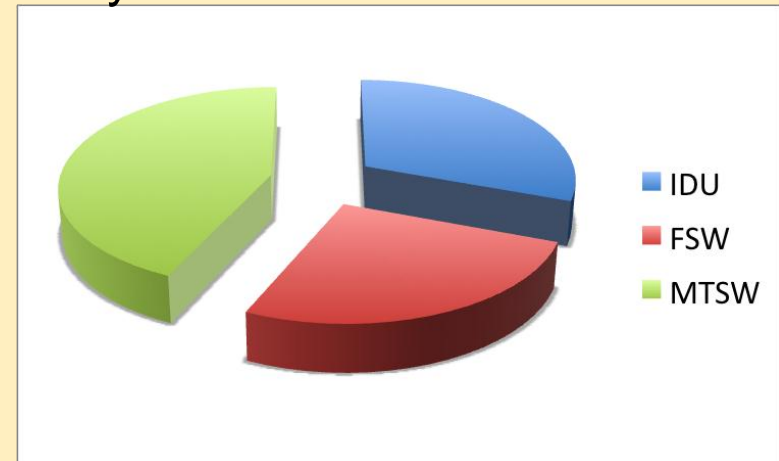
Dissemination Seminar on "HIV & STIs in Pakistan: From Analysis to Action"
Presentation by Dr. Sarah Hawkes, Principal Investigator, LSHTM

Resource allocation compared to size of population at risk

Resource allocation across four Provinces 2003-9



Mapping estimates, 2007, 12 cities. FSWs are street-based only



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Notice that even within the officially recognized THREE high-risk behavior groups, the allocation of resources was utterly disproportionate compared to their official head counts...