

From the Desk of Editor in Chief



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History of outbreaks of HIV in Hemodialysis Units

Hemodialysis patients are at greater risk of hospital acquired infections than any other hospitalized patients, particularly for blood borne infections transmission. Over the years' patient safety has benefited from continuous improvements in dialysis machine design, equipment safety, diagnostic assays, vaccines, and guidelines that emphasize evidence-based infection prevention strategies.

The history of outbreaks of HIV in hemodialysis units' dates back to 1990. Reported from Egypt in 1990, in which a total of 82 HIV infections occurred at 3 renal dialysis centers.

Reported from Argentina in 1993, where from a single center 20 out of 34 registered dialysis patients were found HIV positive. Catheters of the clinic's dialysis machines were found to be contaminated with HIV in this case. In 1993 reported from Colombia, South America, 13 dialysis patients tested positive for HIV. While investigated it was reported that Dialyzers were reprocessed separately with 5% formaldehyde and were labelled for use on the same patient. Access needles were reprocessed by soaking them in a common container with a low-level disinfectant, benzalkonium chloride; 4 pairs of needles were placed in one pan creating the potential for cross-contamination or use of one patient's needles on another patient.

In 2014, Saudi Arabia published report on patients getting seroconversion from negative to positive while coming for hemodialysis, 3 patients after excluding other possible causes got HIV positive results at dialysis center. In all HDUs except for the one in Riyadh, multi-dose heparin vials were shared with multiple patients. Dialyzers are single-use devices in KSA.

An outbreak in dialysis unit of Chandka medical College, Larkana, reported 56 HIV positive patients in October 2016. It started with, when a dialysis patient went to some private laboratory and found HIV positive and this patient reported to nephrologist of the unit who then screened all registered patients coming for dialysis at same unit and 56 among 205 (27.3%) found HIV positive. The report mentions that infection control practices were few and no machines were dedicated to patients with hepatitis B virus, hepatitis C virus or HIV infections. Interviewed patients indicated that they had purchased blood from unregulated laboratories and blood banks of the area.

Recent incidence reported from hemodialysis unit of Nishtar Medical College Multan, where Daily newspaper reported on 14th November 2024 that one patient died and 30 other found HIV positive at same hemodialysis unit. This is well known fact that transmission of HIV in dialysis unit is almost nil "IF" proper infection control procedure guidelines are not breached at all levels in the hemodialysis unit, blood banks and surgical procedure rooms and theaters. Any seroconversion or outbreak at a health care facility should include proper investigation

at all these levels of transmission. Punjab health Care Commission has already laid down extensive Minimum Service Delivery Standards (MSDS) for Dialysis facility. Nephrology community all over the country has expressed profound concern for safety and welfare of all dialysis patients managed at any nephrology facility in the country. At the same time, we nephrology community are highly concerned about getting proper investigation of this incidence and resuming the nephrology/ dialysis services so that end stage kidney failure patients should not suffer further misery of non-provision of life saving treatment of dialysis for them.

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