

Prevalence of hepatitis B and hepatitis C Virus infections among male to female (MFT) transgenders in Rawalpindi (Pakistan)

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	Value	Negative (%)	Positive (%)	Prevalence (%)	P-value
Had knowledge about the safe sex habits of their partner	Yes	2 (0.7)	10 (3.3)	83.33	0.000
	No	226 (73.9)	68 (22.2)	23.13	
Shaving behavior	Home	146 (47.7)	57 (18.6)	28.08	0.054
	Barber	17 (5.6)	9 (2.9)	34.61	
	Both	65 (21.2)	12 (3.9)	15.58	
Blood transfusion history	Yes	71 (23.2)	19 (6.2)	21.11	0.257
	No	157 (51.3)	59 (19.3)	27.32	
Visit to street dentists	Yes	57 (18.6)	28 (9.2)	32.94	0.064
	No	171 (55.9)	50 (16.3)	22.62	
No. of sex partner per week	≤ 20	161 (52.6)	44 (14.4)	21.46	0.021
	> 20	67 (21.9)	34 (11.1)	33.66	
Pansexuality\ marital Status	Married	49 (16)	7 (2.3)	12.5	0.014
	Un-married	179 (58.5)	71 (23.2)	28.4	
Educational background	≤ 5th	118 (38.6)	53 (17.3)	30.99	0.012
	6th to 10th	72 (23.5)	21 (6.9)	22.58	
	Above 10 th	38 (12.4)	4 (1.3)	9.52	

Table 1: Association of study variables, by prevalence of HCV among transgender men

Prevalence of HCV among transgender men who claimed to certify their sex partners as STVD free

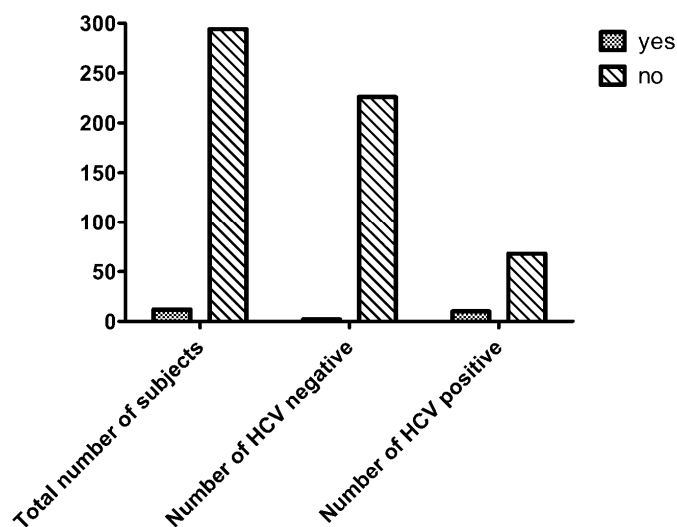


Figure 4: Prevalence of HCV infection among transgender men who claimed to certify their sex partners as STVD free. Subjects claiming to have the knowledge of safe sex habits of their partner had a high prevalence (83.33%) as compared to the subjects who never bothered to ask about the safe sex practices or STD status of their partners (23.13%).

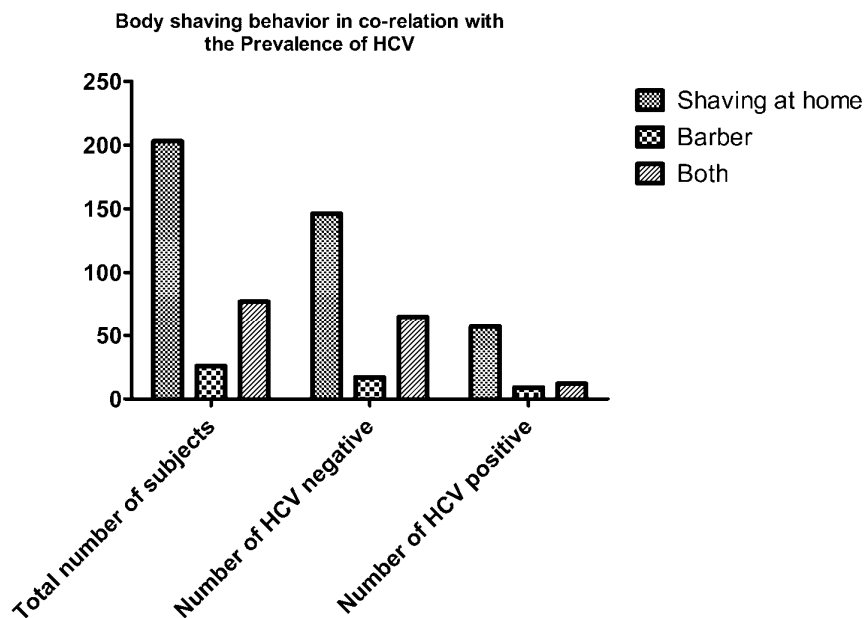


Figure 5: Body shaving behavior in co-relation with the prevalence of HCV infection. Subjects were categorized into three variables: shaving at home, shaving at barber or both. Subjects who shaved at barbers had higher prevalence of 34.61% against 28.08% among those who shaved at home.

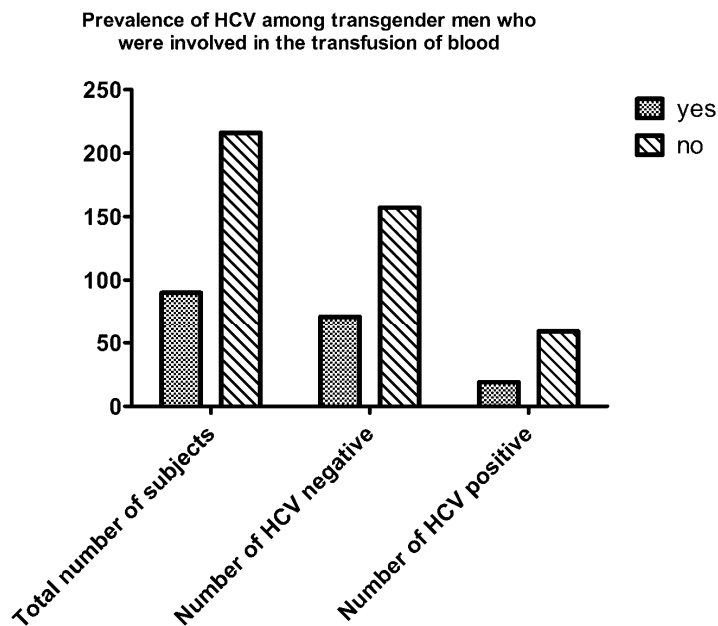


Figure 6: Prevalence of HCV infection among transgender men who were involved in transfusion of blood. Among subjects who were involved in blood transfusions, the prevalence of HCV was 21.11% and among the counter group it was 27.32%.

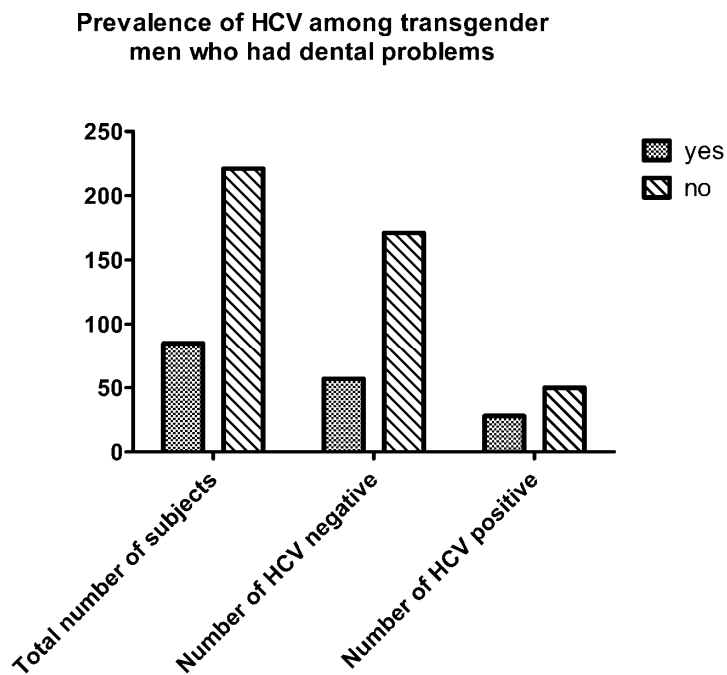


Figure 7: Prevalence of HCV among transgender men who had dental problems; Many of the transgender men included in this study had some dental problems and visited street dentist at least once in past three months. 28 out of those 85 who visited street dental clinic had HCV [68, 69].

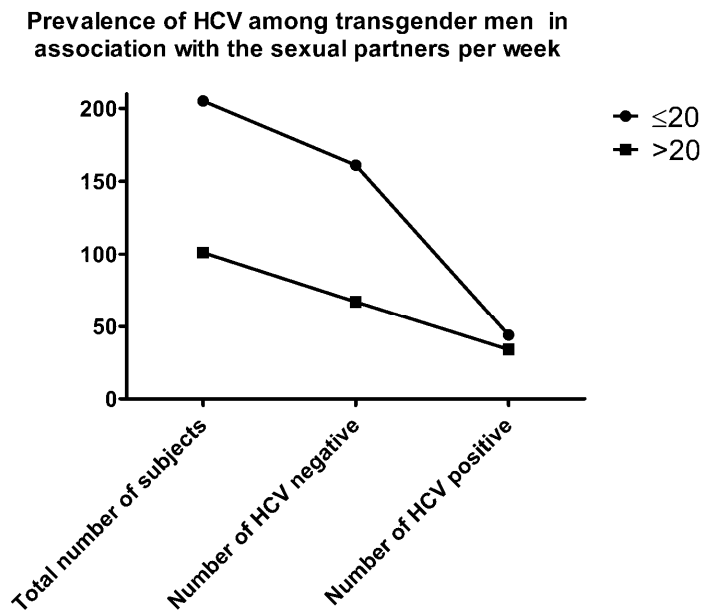


Figure 8: Prevalence of HCV among transgender men with respect to the number of sexual partners per week.

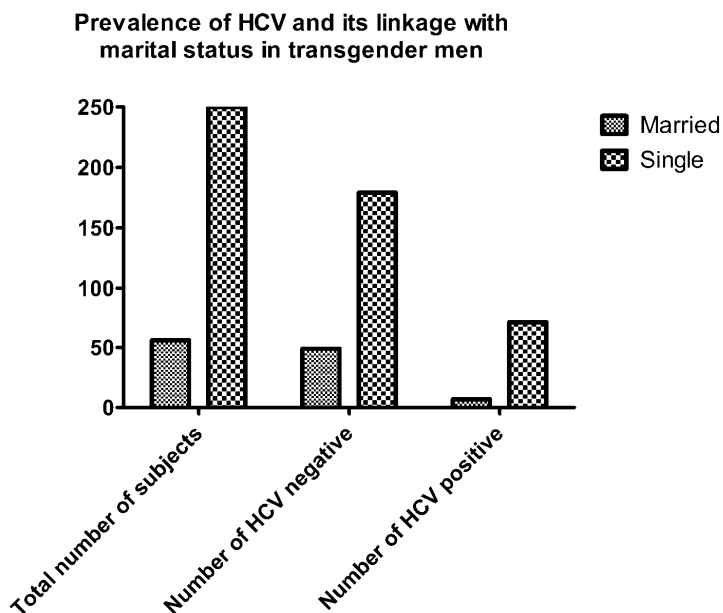


Figure 9: Prevalence of HCV among transgender men in relation to their sexual behavior. Although the prevalence of HCV among married transgender men was low (12.5%) as compared to the unmarried (28.4%), the risk of infecting their wives is still very real.

Awareness about STVDs or literacy rate among transgender men was measured through their educational background and was then equated with the prevalence of HCV

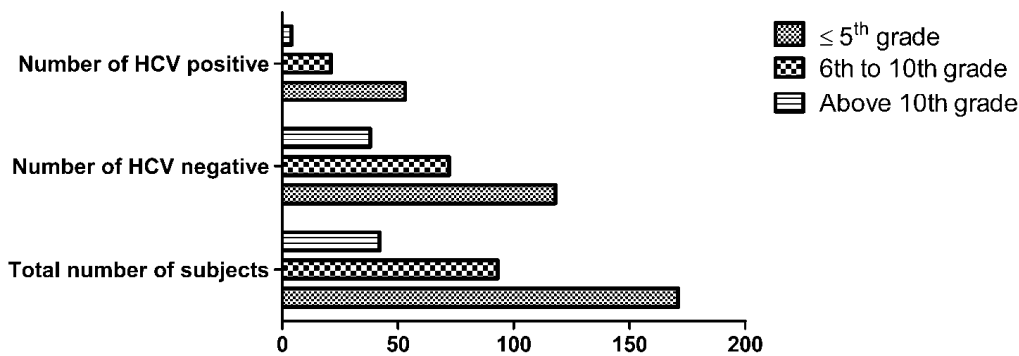


Figure 10: Awareness about STVDs or literacy rate among transgender men was measured through their educational background and was then equated with the prevalence of HCV. Those who finished school below grade 5 had the highest prevalence of HCV (30.99%) whereas those who went to school up till grade 10 had a lower prevalence (22.52%) and those who had education above 10th grade, had the lowest prevalence (9.52%).

Variables	Coefficient	Standard Error	P-value	Odds Ratio
Safe sex habits ^a	3.817	0.881	0.000	45.454
Body shaving behavior	--	--	0.029	--
Home	0.837	0.379	0.027	2.309
Barber	1.363	0.555	0.014	3.910
Blood transfusion ^b	-1.174	0.403	0.004	0.309
Visits to street dentist	0.698	0.306	0.022	2.010
Sex partners >20 per week	0.826	0.306	0.007	2.285
Constant	-2.178	0.395	0.000	0.113

a Asking for safe sex habits of the sex partner

b History of blood transfusion

Table 2: Odds ratios of Logistic regression of study variables, by prevalence of HCV among transgender men

Logistic Regression Equation

$$p = \frac{e^{-2.178+0.826SexPartnersPerWeek+0.698StreetDentistVisits-1.174BloodTrans+1.363Barbar+0.837Home+3.817SafeSexHobies}}{1 + e^{-2.178+0.826SexPartnersPerWeek+0.698StreetDentistVisits-1.174BloodTrans+1.363Barbar+0.837Home+3.817SafeSexHobies}}$$

The above equation can be illustrated as follows:

- p is the probability of prevalence of HCV
- Asking for safe sex habits of the partner (Yes=1, No=0)
- Shaving behavior (Home=1, Otherwise=0)