

Table 3 Factors increasing the possibility of suffering a high-risk needlestick injury (NSI) among health care workers (HCW) in teaching hospitals in Alexandria

Transmission factor	Total sample	High-risk NSI		Low-risk NSI		OR	95% CI	P-value
	(n = 645)	No.	%	No.	%			
Exposure to patient with evidence of bloodborne infection	36	30	83.3	6	16.7	12.4	4.6–23.8	0.003
Procedure involving needle placed directly in vein or artery	130	90	69.2	40	30.8	9.07	2.5–18.8	0.013
Immune status of HCW (hepatitis B unvaccinated)	83	81	97.6	2	2.4	6.35	2.7–9.5	< 0.001
Depth of injury (deep)	133	120	90.2	13	9.8	6.60	1.2–13.7	< 0.001
No personal protective equipment worn by HCW ^a	152	130	85.5	22	14.5	5.20	1.6–15.1	< 0.001
Body part injured (vascular)	102	20	19.6	82	80.4	0.62	0.1–1.8	0.309
Device was visibly contaminated with patient's blood	318	95	29.9	223	70.1	1.77	0.3–3.4	0.053
No follow-up testing for exposed HCW	119	49	41.2	70	58.8	1.72	0.5–3.2	0.254
Device was large-gauge hollow-bore needle	236	104	44.1	132	55.9	1.59	0.9–2.9	0.305
Unavailability or non-use of prophylactic medication ^b	118	45	38.1	73	61.9	1.53	0.7–4.8	0.396
Time interval between injury and wound cleansing (> 30 min)	201	70	34.8	131	65.2	1.39	0.2–3.7	0.326
Long duration of potential contact	101	53	52.5	48	47.5	1.30	0.7–6.5	0.137

^aGloves, mask, eye protection, face shield, gowns.

^bAntiretroviral therapy, immunoglobulin and vaccination for hepatitis B.

OR = odds ratio; CI = confidence interval.