

Table 3 Classification of identified human subject research studies according to publication period, study location and ethical documentation required

Period/location	Total		Ethical guidelines used				Information documented				IRB approval required			
			IRB approval + informed consent required		IRB approval required									
			Yes		No		Yes		No		Yes		No	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Publication period														
1979-89	383	20.8	0	0.0	383	100.0	0	0.0	211	100.0	1	0.6	171	99.4
1990-99	612	33.3	2	0.3	610	99.7	4	1.5	266	98.5	1	0.3	341	99.7
2000-07	843	45.9	14	1.7	829	98.3	67	19.7	273	80.3	21	4.2	482	95.8
Study location														
Outside Saudi Arabia	469	25.5	6	1.3	463	100.0	40	15.9	211	84.1	8	3.7	210	96.3
Inside Saudi Arabia	1369	74.5	10	0.7	1259	92.0	31	5.4	539	94.6	15	1.9	784	98.1

IRB = institutional review board.