

재활정책

게시일시 및 장소 : 10 월 19 일(토) 08:30-12:30 Room G(3F)

질의응답 일시 및 장소 : 10 월 19 일(토) 11:00-11:30 Room G(3F)

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Burden of work-related upper limb amputation in Korea, 2004-2013

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Objectives

Among work-related injuries, amputation is the most serious condition that can affect the current and future quality of life. Most amputations involve the upper limb and are preventable. Measurement of the burden of disease can help prevent work-related injuries by assessing their characteristics. However, few studies have measured the burden of disease associated with work-related amputation. This study aimed to measure the burden of work-related upper limb amputation in Korea over a 10-year period and assess its trend.

Methods

We extracted upper limb amputation-related codes using the 2004–2013 Korea workers' compensation insurance data. Among the 49,535 subjects, the disability-adjusted life years were calculated by sex, age, and the site of amputation using annual incidence.

Results

The burden of work-related upper limb amputation in Korea reached its peak in 2007 and has decreased thereafter. Males showed a higher burden of disease. Finger amputations showed a decreasing trend from 2007, whereas arm amputations continued to show an increasing trend. An increasing trend was found among participants older than 50 years.

Conclusions

The decrease in the burden of finger amputations may be attributable to the lower incidence as a result of policy efforts. The increase in the burden of arm amputations was particularly noticeable among the elderly population over 50 years old. This could be attributable to the lack of policy efforts regarding major amputations in Korea and the high proportion of the elderly population working in the manufacturing sector. Future regulatory efforts are needed in the prevention of amputations.

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Table 1. Standardized DALYs on work-related upper limb amputation in Korea from 2004-2013

	'04	'05	'06	'07	'08	'09	'10	'11	'12	'13
Total	43.00	44.08	51.40	56.05	50.80	49.73	47.41	50.54	46.79	46.23
Finger										
Total	18.99	21.44	23.45	24.75	23.31	21.97	21.57	20.89	18.43	17.13
Male	22.80	26.13	28.68	29.91	28.90	26.79	25.99	25.37	22.10	21.01
Female	13.61	14.82	16.06	17.47	15.42	15.17	15.33	14.58	13.25	11.66
Thumb										
Total	9.47	10.04	10.72	14.55	11.06	10.22	10.25	10.29	8.81	9.14
Male	11.56	12.33	12.80	13.97	13.65	13.06	12.76	12.50	10.65	11.08
Female	6.50	6.81	7.77	15.37	7.41	6.22	6.72	7.17	6.20	6.40
Arm										
Total	14.55	12.60	17.24	16.75	16.44	17.53	15.59	19.36	19.55	19.96
Male	17.47	16.98	20.20	21.68	19.58	21.84	20.08	24.41	22.74	24.58
Female	10.43	6.42	13.06	9.80	12.01	11.45	9.24	12.25	15.05	13.33