

OWAS

f.ghamari@gmail.com :

Abdoli Eramaki )

(2000

(Kuorinka and Forcier 1995)

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(Ardakani et al. 2005)

(Choobineh 2008)

(Jafari and Bathaei 2004)

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( NIOSH 1997).

( Perkiio and kela 2005)

(Choobineh et al. 2004)

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(Fouladi Dehghi et al. 2008)

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.(Ghasemkhani and booya 2003)

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(Nasl Saraji et al. 2005)

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(Kachoian 1999)

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Nasl Saraji et al. ) % / % /  
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(Habibi and Zohre 2004)

Kivi and Mattila 1991; ).  
(Fang et al. 2004; Wang et al. 2000

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**OWAS**

*P value*

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- Iranian Ports. *Acta Medica Iranica*, **42**(5), pp.350-354 [In Persian].
- Jafari, MJ. and Bathaei, A., 2004. Associations of Awkward postures with musculoskeletal symptoms among assembling unit workers in an automobile industry. *Fourth congress of occupational health in iran-hamadan* [In Persian].
- Kivi, P. and Mattila, M., 1991. Analysis and improvement of work postures in the building industry: application on the computerized OWAS method. *Applied Ergonomics*. **22**(1), pp. 43–48.
- Kuorinka, I. and Forcier, L., 1995. Work related musculoskeletal disorders (WMSDs), A reference book for prevention. *London, Taylor and Francis*.
- Nasl Saraji, J., Hoseini, M., Shahtaheri, SJ. and Ghasemkhani M., 2005. Evaluation of ergonomic postures of dental professions by Rapid Entire Body Assessment (REBA), in Birjand, Iran.. *Journal Of dental Medicine*.**1**(18),pp.61-6[In Persian].
- Nasl Seraji, J. and Kachoian H., 1999. Ergonomics evaluation of work posture in OWAS method in Ballast mines. *The Journal of Tehran Faculty of Medicine*. **3**(57). pp, 58-52 [In Persian].
- National Institute for Occupational Safety and Health (NIOSH).,Musculoskeletal disorders and workplace factors: A critical review of epidemiologic evidence for work-related disorders of the neck, upper extremity, and low back. USA: DHHS (NIOSH) Publication;1997, pp. 97-141.
- Perkio, M. and Kela, M., 2005. Physical workstrain of dairy farming in loose housing barns. *International Journal of Industrial Ergonomics*. **35**, pp.57-65.
- Wang, Z., Dongxue, Y.u. and Kejun, Jia., 2000. Work-related Disorders in Steel Industry. *Ind Health and Occup Dis.*, **26**(4),pp.216-223.