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References

Abdoli Eramaki, M., 2000. Biomechanics and workstation designing, first issue, *Tehran, omide majd press* [In Persian].

Choobineh, A., 2008. The methods Evaluation of Posture in occupational Ergonomics, Second issue, *Hamdan Fanavarn press* [In Persian].

Choobineh, A., Tosianb, R. and Alhamdic, Z., 2004. Ergonomic intervention in carpet mending operation. *Appl Ergon*, **35**, pp.493–496 [In Persian].

Ardakani, F., Haerian Ardakani, A., Akhavan Karbasi, MH., Dehghan and Tezerjani, Kh., 2005. Assessment of musculoskeletal disorders prevalence among dentists. Journal of Dentistry Tehran University of Medical Sciences. **41**(17), pp. 52 -60 [In Persian].

Fang, D., Wu, S., Wong, F. and Shen, Q., 2004. A comparative study on safety and use of bamboo and metal scaffolding in Hong Kong. In: Rowlinson, S. (Ed.),

Construction Safety Management Systems. *Spon Press, London*, pp. 373–385.

Fouladi Dehghi, B., Dehghan, H., Ebrahimi Ghavam Abadi, L., 2008. Evaluation of Exposure to Risk Factor Associated with Musculoskeletal Disorders in a House Hold goods assembling Company. *Journal*

of Medical Faculty Guilan University of Medical Sciences, **64**(16), pp. 97-105

Ghasemkhani, M., Booya M.,2003. Ergonomic situations of Pars switch factory workers analyzed by OWAS method, Zanjan 2001. *Journal Of Zanjan University of Medical Sciences and Health Services*; **41**(10), pp. 43-39 [In Persian].

Habibi, E. and Zohre, F., 2004. Evaluation of ergonomic position during work IN Mahyaman factory workers esfahan-iran. Fourth congress of occupational health in iran-hamadan [In Persian].

Hasanzadeh, M.A., Nasle saraji, J., 2004. Evaluation of Musculoskeletal Disorders Risk factors Among the Crew of the

- 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 OWASmethod. *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 reviewof epidemiologic evidence for workrelated 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.