

The Risk of Deaths from Viral Hepatitis among the Female Workers in the Beauty Service Industry

Authors : Byeongju Choi, Sanggil Lee, Kyung-Eun Lee

Abstract : Introduction: In the republic of Korea, the number of workers in the beauty industry has been increasing. Because the prevalence of hepatitis B carriers in Korea is higher than in other countries, the risk of blood-borne infection including viral hepatitis B and C, among the workers by using the sharp and contaminated instruments during procedure can be expected among beauty salon workers. However, the health care policies for the workers to prevent the blood-borne infection are not established due to the lack of evidences. Moreover, the workers in hair and nail salon were mostly employed at small businesses, where national mandatory systems or policies for workers' health management are not applied. In this study, the risk of the viral hepatitis B and C from the job experiencing the hair and nail procedures in the mortality was assessed. Method: We conducted a retrospective review of the job histories and causes of death in the female deaths from 2006-2016. 132,744 of female deaths who had one more job experiences during their lifetime were included in this study. Job histories were assessed using the employment insurance database in Korea Employment Information Service (KEIS) and the causes of death were in death statistics produced by Statistics Korea. Case group (n= 666) who died from viral hepatitis was classified the death having record involved in 'B15-B19' as a cause of deaths based on Korean Standard Classification of Diseases(KCD) with the deaths from other causes, control group (n=132,078). The group of the workers in the beauty service industry were defined as the employees who had ever worked in the industry coded as '9611' based on Korea Standard Industry Classification (KSIC) and others were others. Other than job histories, birth year, marital status, education level were investigated from the death statistics. Multiple logistic regression analysis were used to assess the risk of deaths from viral hepatitis in the case and control group. Result: The number of the deaths having ever job experiences at the hair and nail salon was 255. After adjusting confounders of age, marital status and education, the odds ratio(OR) for deaths from viral hepatitis was quite high in the group having experiences with working in the beauty service industry with 3.14(95% confidence interval(CI) 1.00-9.87). Other associated factors with increasing the risk of deaths from viral hepatitis were low education level(OR=1.34, 95% CI 1.04-1.73), married women (OR=1.42, 95% CI 1.02-1.97). Conclusion: The risk of deaths from viral hepatitis were high in the workers in the beauty service industry but not statistically significant, which might attributed from the small number of workers in beauty service industry. It was likely that the number of workers in beauty service industry could be underestimated due to their temporary job position. Further studies evaluating the status and the incidence of viral infection among the workers with consideration of the vertical transmission would be required.

Keywords : beauty service, viral hepatitis, blood-borne infection, viral infection

Conference Title : ICOHS 2020 : International Conference on Occupational Health and Safety

Conference Location : Tokyo, Japan

Conference Dates : November 17-18, 2020