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DEAR EDITOR,

Now-a-days, preventive medicine and its important arm, occupational and environmental medicine, are in the limelight more than ever before.^[1] Science production in this field of medicine is growing very fast and in recent years, many scientific journals have published specifically occupational and environmental health articles in Iran.

According to the section 92 of Iranian labor law,^[2] employers should provide free annually medical examination for employees at risk. These annually comprehensive medical databases are ideal for researchers because of no or very low additional time and cost.

On the other hand, workers, especially temporary workers and those with lack of job security avoid any responses to subjective questions of occupational health team that may lead to loss of job, deterioration of working conditions or loss of job promotions; questions such as drug usage, alcohol consumption or even tobacco usage, history of some diseases and etc., Also, admitting to some subjective symptoms can impose time and cost for additional diagnostic test or medical consultation to employees, for example, admitting to snoring may result in some problem in certification renewal of a professional driver and some costs for sleep tests in order to roll out of obstructive sleep apnea. Sometimes, in contrast, annually findings are affected seriously by false subjective symptoms due to secondary gain.

During a study on sleep quality of professional firefighters using Pittsburgh sleep quality index (PSQI),^[3] the questionnaire and data collection sheets were sent mistakenly through office automation system of central office (an electronic information system for transmission of messages between central office of fire and rescue organization and fire houses) for a group of participants; while according to the research protocol, data gathering must be performed only through structured interviews by researcher. In this process, a certified physician was ensured participants that this research is granted by an academic foundation not by their employer and their responses will be quite private. Therefore, the program was repeated for the above mentioned 41 participants.

In addition to increased participation and a significant reduction in missing data, comparison of the results showed a significant difference

Variables	Mea	Mean		SD		t	P *
	Automation	Interview	Automation	Interview			
Age (year)	32.85	32.76	6.62	6.57	0.097	1.13	0.26
Job experience (year)	10.20	9.86	6.85	6.72	0.33	0.97	0.33
Tea usage (cup/day)	3.89	4.22	2.54	2.86	-0.32	-0.78	0.43
Coffee usage (cup/day)	0.24	0.35	0.54	0.75	-0.10	-0.75	0.45
C1 [†]	1.07	1.32	0.85	0.57	-0.25	-1.65	0.105
$C2^{\dagger}$	0.97	1.25	0.90	0.84	-0.28	-2.22	0.032**
C3 [†]	0.87	1.07	1.00	1.10	-0.20	-1.34	0.18
$C4^{\dagger}$	0.35	0.61	0.66	0.84	-0.25	-1.95	0.058
$C5^{\dagger}$	0.71	1.05	0.60	0.55	-0.33	-3.60	0.001**
$C6^{\dagger}$	0.10	0.13	0.49	0.51	-0.025	-0.227	0.82
$C7^{\dagger}$	1.07	1.82	0.99	0.87	-0.75	-4.21	<0.001**
PSQI [‡]	5.21	7.21	4.05	2.85	-2.00	-3.55	0.001**

Table 1: Comparison of the results from two data collection method	ls about some quantitative variables
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**P* value is based on paired *t*-test, **Statically significant, [†]Components of the Pittsburgh sleep quality index, [‡]Final score of the Pittsburgh sleep quality index (>5 considered as poor sleep quality); SD=Standard deviation

Table 2: Comparison of the results from two data collection methods about some qualitative variables

Variables	n		%		Difference	P *
	Automation	Interview	Automation	Interview		
Tobacco usage (Yes)	3	16	7.5	40	32.5	< 0.001**
Marriage status (Yes)	29	30	74.4	76.9	2.6	0.999
Shift working (Yes)	39	40	97.6	100	2.4	0.999
Having any diseases (Yes)	7	4	17.1	9.8	7.3	0.375
Medication usage (Yes)	6	3	14.6	7.3	7.3	0.453
Having second job (Yes)	6	16	14.6	39	24.4	0.013**

*P value is based on McNemar test, **Statically significant

between the two methods. Tables 1 and 2 show this difference. As seen, in automation method some answers to specific questions such as cigarette smoking and having a second job were incorrect; topics that are implicitly prohibited among firefighters. Interestingly, the main goal of the study (PSQI score) was changed significantly with correction of the method as well as some of its components. Demonstration of their suitable fitness for work to the employer may be a reason of this phenomenon as well; although, more investigation is necessary.

Knowing that firefighters are relatively good socio-economic, educational and cultural level employees with suitable job security in Iran;^[3] it seems that this methodological effect, sometimes named measurement,^[4] information,^[5] reporting^[6] or social desirability^[7] bias, may be even more significant among blue collar and temporary workers.^[8] Now-a-days many important occupational medicine researches use medical databases of factories, office automation systems, E-mail or postal methods for data gathering that result in some paradoxical findings. It seems that researchers and scientific referees should pay more attention to this aspect of occupational medicine studies. Finding of subjective variables, especially sensitive topics of each occupation, are less reliable and must be interpreted cautiously.

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