

ORIGINAL ARTICLE

The Relationship between Diet Quality, Sleep Quality, and Shiftwork in Clinical and Non-Clinical Healthcare Workers Participating in Cohort Study of Shiraz University of Medical Sciences Employees, Shiraz, Iran

Seyed Jalil Masoumi^{1,2,3}, Fatemeh Shafiee², Sanaz Jamshidi⁴, Ali Mohammad Keshtvarz Hesam Abadi⁵, Sahand Behzadi-Azad⁶, Zahra Mousavi-Shirazi-Fard^{1,2*}

1. Nutrition Research Center, Shiraz University of Medical Sciences, Shiraz, Iran

2. Department of Clinical Nutrition, School of Nutrition and Food Sciences, Shiraz University of Medical Sciences, Shiraz, Iran

3. Gastroenterohepatology Research Center, Department of Clinical Nutrition, School of Nutrition and Food Sciences, Shiraz University of Medical Sciences, Shiraz, Iran

4. Center for Cohort Study of Shiraz University of Medical Sciences Employees, Shiraz University of Medical Sciences, Shiraz, Iran

5. Department of Biostatistics, Shiraz University of Medical Sciences, Shiraz, Iran

6. Student Research Committee, School of Nutrition and Food Sciences, Shiraz University of Medical Sciences, Shiraz, Iran

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ABSTRACT

Background: Since little is known about the correlation between dietary habits and sleep quality in healthcare professionals, the current study was performed to determine the relationship between diet quality, sleep quality, and shiftwork in clinical and non-clinical healthcare workers participating in Cohort Study of Shiraz University of Medical Sciences Employees, Shiraz, Iran.

Methods: In a cross-sectional preliminary research, data of 3375 participants from Shiraz University of Medical Sciences Employees Health Cohort Study (SUMS EHCS) were enrolled. The work schedules of participant were classified into fixed and rotating shifts. Sleep quality and dietary intake were evaluated using the Pittsburgh Sleep Quality Questionnaire (PSQI) and a food frequency questionnaire (FFQ). To assess dietary scores, we computed the healthy eating index (HEI) and dietary diversity score (DDS).

Results: Among participants, 75% were engaged in fixed shiftwork, while 25% were involved in rotating shiftwork. Notably, 34% of clinical occupational group were on rotating shifts when compared to 20% of non-clinical occupational group ($p < 0.0001$). After adjusting for confounding factors, non-clinical healthcare workers demonstrated a higher DDS score, but poorer sleep quality compared to clinical healthcare workers ($p < 0.0001$ and $p < 0.0001$, respectively). Additionally, years of employment were associated with higher HEI scores and diminished sleep quality ($p < 0.05$).

Conclusion: Our study indicated that non-clinical healthcare personnel exhibited higher DDS scores; while simultaneously experiencing lower sleep quality compared to their clinical colleagues. Furthermore, the duration of employment was linked to elevated HEI scores and reduced sleep quality.

*Corresponding author:

Zahra Mousavi-Shirazi-Fard, PhD;

Department of Clinical Nutrition,

School of Nutrition and Food

Sciences, Shiraz University of

Medical Sciences, Shiraz, Iran.

Tel: +98-71-37258099

Fax: +98-71-37257288

Email: Shirazifard1393@gmail.com

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HEI scores and diminished sleep quality. These findings reinforce the need for further studies.

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Authors' Contribution

ZMSF conceptualized and supervised the study. FS and AMKHA analyzed and interpreted the data. SJ, FS and SBA wrote the manuscript. SJM supervised data collecting. All authors have read and agreed to the published version of the manuscript.

Conflict of Interest

The authors declare no conflict of interests.

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