The present work examined data obtained during the analysis of Hearing Reduction (HR) of Abadan Petroleum Refinery (Abadan PR) workers of Iran with a history of disease and injuries. To this end, all workers in the refinery were chosen. In this research, the effects of history of disease and injury including trauma, electric shock, meningitis-typhoid disease and genetic illness as well as contact with lead, mercury, CO₂ and alcohol consumption were evaluated (Lie, et al., 2016) [1]. After the completion of the questionnaires by workers, the coded data were fed into EXCELL. Statistical analysis of data was carried out, using SPSS 16.

© 2017 The Authors. Published by Elsevier Inc. This is an open access article under the CC BY license (http://creativecommons.org/licenses/by/4.0/).
**Specifications Table**

| Subject area                      | Medicine, clinical research |
|-----------------------------------|-----------------------------|
| More specific subject area        | Risk factors accelerating hearing reduction |
| Type of data                      | Table, figure               |
| How data was acquired             | Observation hearing reduction assessment of the workers and researcher-made questionnaire analysis |
| Data format                       | Raw, analyzed, descriptive data |
| Experimental factors              | Hearing reduction is one of the factors which affect the efficiency of workers. |
| Data source location              | Abadan, Iran                |
| Data accessibility                | Data are included in this article. |

**Value of the data**

- Data describe those factors which affect the acceleration of hearing reduction among which are useful for promoting the workers’ education in order to prevent this complication.
- Due to the importance of the relationship between hearing reduction with history of diseases and injuries among petroleum refinery workers, these factors are discussed in this article.
- The results showed that hearing reduction can be decreases the efficiency of workers.
- The results of this study can be used to develop a prevention program to decrease hearing reduction among the workers of petroleum refinery.
- Results are also important for workers with hearing reduction especially those workers who were detected in this study.

1. **Data**

The dataset of this article provides information on the relationships between hearing reduction with history of disease and injuries among workers in Abadan Petroleum Refinery, Iran. Table 1 represents demographic characteristics of Abadan Petroleum Refinery workers of Iran in 2016. Table 2 shows the data of accelerating factors of hearing reduction among workers of Abadan PR.

2. **Experimental design, materials and methods**

2.1. **Description of Study area**

Petroleum Refinery of Abadan was selected for the purpose of the study. Abadan with a population of 300,000 people is one of the metropolitan cities of Khuzestan province [2]. Abadan is Located in the
south of Khuzestan province, southwest of Iran (see Fig. 1). Khuzestan province has a hot and semi-humid climate with long summers and short winters [3,4].

2.2. Design

291 workers of Abadan petroleum refinery participated in this study. A questionnaire was constructed by the researcher based on the risk factors adopted from Williams' Obstetrics and Gynecology (based on the risk factors adopted from Williams' Obstetrics and Gynecology), which comprised the demographic data (e.g. age, sex and job experience) and questions related to the causes and effective factors of the acceleration of hearing reduction, which included history of some diseases and injuries (trauma, electric shock, meningitis-typhoid disease and genetic illness), contact with lead, mercury, CO₂ and alcohol consumption [1,5]. After that, the collected data were coded and entered into SPSS version 16. Data analysis was performed using SPSS-16. All risk factors were taken into account. Data were analyzed using descriptive statistics.

Table 1
Demographic characteristics of pregnant workers in Abadan petroleum refinery.

| Parameter                | Characteristics | Number (In percent) |
|--------------------------|-----------------|---------------------|
| Gender                   | Male            | 283 (97.25%)        |
|                          | Female          | 8 (2.75%)           |
| Age group                |                 |                     |
| 15–24                    |                 | 19 (6.53%)          |
| 25–34                    |                 | 90 (30.94%)         |
| 35–44                    |                 | 125 (42.95%)        |
| 45–55                    |                 | 45 (15.46%)         |
| More than 55             |                 | 12 (4.12%)          |
| Years of work experience |                 |                     |
| 1–5 years                |                 | 91 (31.3%)          |
| 5 years and more         |                 | 200 (68.7%)         |

Table 2
Ranking of factors affecting the accelerating hearing reduction in workers in Abadan petroleum refinery based on their importance.

| Factors                               | Number | Percent |
|---------------------------------------|--------|---------|
| History Trauma                        | 26     | 8.93    |
| History Electric Shock                | 6      | 2.06    |
| Meningitis-Typhoid Disease            | 17     | 5.84    |
| Genetic Illness                       | 12     | 4.12    |
| Contact with Lead, Mercury            | 12     | 4.12    |
| Contact with CO₂                      | 6      | 2.06    |
| Alcohol Consumption                   | 14     | 4.81    |
Acknowledgements

The authors would like to thank Student Research Committee, Abadan University of Medical Sciences for providing financial support for this research (Grant no.: IR.ABADANUMS.REC.1395.109).

Transparency document. Supporting information

Supplementary data associated with this article can be found in the online version at http://dx.doi.org/10.1016/j.dib.2017.12.002.
References

[1] L. Lie, M. Skogstad, H.A. Johannessen, T. Tynnes, I.S. Mehlum, K.C. Nordby, B. Engdahl, K. Tambs, Occupational noise exposure and hearing: a systematic review. Int. Arch. Occup. Environ. Health 89 (2016) 351–372.

[2] M. Momtazan, M.J. Mohammadi, R. Tabahfar, S. Rezaee, A. Valipour, A.R. Yari, A. Karimyan, S. Geravandi, Risk factors accelerating hypothyroidism in pregnant women referred to health centers in Abadan, Iran. Data. Brief 14 (2017) 15–19.

[3] R. Nashibi, S. Afzalzadeh, M.J. Mohammadi, A.R. Yari, F. Yousefi, Epidemiology and treatment outcome of mucormycosis in Khuzestan, Southwest of Iran, Arch. Clin. Infect. Dis. 12 (2016) e37221.

[4] M. Khaefi, S. Geravandi, G. Hassani, A.R. Yari, F. Soltani, S. Dobaradaran, S. Moogahi, M.J. Mohammadi, M. Mahboubi, N. Alavi, M. Farchi, Association of particulate matter impact on prevalence of chronic obstructive pulmonary disease in Ahvaz, southwest Iran during 2009–2013, Aerosol Air Qual. Res 17 (2017) 230–237.

[5] W.E. Daniell, S.S. Swan, M.M. McDaniel, J.E. Camp, M.A. Cohen, J.G. Stebbins, Noise exposure and hearing loss prevention programmes after 20 years of regulations in the United States, Occup. Environ. Med. 63 (2006) 343–351.