



ELSEVIER

Contents lists available at ScienceDirect

## Data in Brief

journal homepage: [www.elsevier.com/locate/dib](http://www.elsevier.com/locate/dib)

## Data Article

## Microbiological dataset of rural drinking water supplies in Zahedan, Iran



Majid RadFard<sup>a</sup>, Hamed Biglari<sup>e</sup>, Hamed Soleimani<sup>d</sup>,  
Hesam Akbari<sup>a</sup>, Hamed Akbari<sup>a</sup>, Hossein Faraji<sup>b</sup>,  
Omid Dehghan<sup>c</sup>, Abbas Abbasnia<sup>d</sup>, Mona Hosseini<sup>d</sup>,  
Amir Adibzadeh<sup>a,1,\*</sup>

<sup>a</sup> Health Research Center, Lifestyle Institute, Baqiyatallah University of Medical Sciences, Tehran, Iran

<sup>b</sup> Students Research Committee, Hamadan University of Medical Sciences, Hamadan, Iran

<sup>c</sup> Department of Medical Entomology and Vector Control, School of Public Health, Tehran University of Medical Sciences, Tehran, Iran

<sup>d</sup> Department of Environmental Health, School of public Health, Tehran University of Medical Sciences, Tehran, Iran

<sup>e</sup> Department of Environmental Health Engineering, School of Public Health, Gonabad University of Medical Sciences, Gonabad, Iran

## ARTICLE INFO

## Article history:

Received 10 March 2018

Received in revised form

11 August 2018

Accepted 17 August 2018

Available online 23 August 2018

## Keywords:

Drinking water

Coliform and fecal coliform

Residual chlorine

HPC

Zahedan

## ABSTRACT

The residual chlorine and microbial quality of drinking water in the Zahedan villages by a number of 1221 samples from all 168 villages were collected between 2014–2015. Then the samples were evaluated using 9-tube fermentation methods and portable chlorine method test. Based on the microbial coliform and fecal coliform indices, the data indicated that the maximum and minimum controlling of the bacteria in the distribution network were in the winter (90.62%) and autumn (85.56%), respectively. Also in the reservoirs, the maximum and minimum controlling of the bacteria were in winter (93.49%) and autumn (87.35%), respectively. The residual chlorine was prepared in almost all of seasons. Crown Copyright © 2018 Published by Elsevier Inc. This is an open access article under the CC BY license (<http://creativecommons.org/licenses/by/4.0/>).

\* Corresponding author.

E-mail addresses: [Radfard.tums.ac.ir@gmail.com](mailto:Radfard.tums.ac.ir@gmail.com) (M. RadFard), [rsr.adibzadeh@bmsu.ac.ir](mailto:rsr.adibzadeh@bmsu.ac.ir) (A. Adibzadeh).

<sup>1</sup> Present address: Health Research Center, Life style Institute, Baqiyatallah University of Medical Sciences, Tehran, Iran

## Specifications Table

Subject area	Water microbiology
More specific subject area	Microbiology
Type of data	Tables, Figure
How data was acquired	Data was collected between 2014–2015, 1221 microbial samples were prepared from the water facilities installed in these villages, and the microbial test was performed by MPN, P-A or MF methods and turbidity, temperature, and HPC tests based on the standard method.
Data format	Raw, Analyzed
Experimental factors	The mentioned parameters were analyzed according to the standards for water and wastewater treatment handbook.
Experimental features	The levels of microbial parameters were determined.
Data source location	Zahedan, Sistan and Baluchistan province, Iran
Data accessibility	The data are available whit this article
Related research article	Yousefi et al. [5]

## Value of the data

- The water microbial controlling is very important for prepared the safe drinking water.
- The data are shown that the microbial water quality commonly prepared in Zahedan, Iran and they have consumed safe water.
- The reason for the higher percentage of desirable chlorine in the city of Zahedan in summer is that in the warm seasons, up to 1 mg/l of primary chlorine is due to the prevention of the prevalence of waterborne diseases.
- The data are indicated that the operator must more considerate to chlorination of drinking water in autumn season rather than other seasons.
- Is the data recommended to the reservoir and distribution of drinking water system need to be improving in the chlorination time.

## 1. Data

The residual chlorine and microbial quality of drinking water in the Zahedan villages by a number of 1221 samples from all 168 villages were collected (Table 1). Table 2 shows that the The Chlorometric data of drinking water resources of Zahedan villages, Table 3 shows that The Turbidity data in drinking water sources of Zahedan villages. Data indicated that the maximum and minimum controlling of the bacteria in the distribution network were in the winter and autumn respectively (Table 4). Also in the reservoirs, the maximum and minimum controlling of the bacteria were in winter and autumn respectively (Table 4). And Table 5 shows that the data of HPC microbial population count in reservoirs of Zahedan villages, Table 6 Comparison of desirable microbial index and free chlorine.

**Table 1**

The microbial data of drinking water resources of Zahedan villages.

Season	Number of villages covered	Number of Turbidity tests	Number of chlorometric tests	Number of microbial tests	Number of HPC tests	Number of temperature tests
Spring	168	320	36,207	296	75	320
Summer	168	370	37,046	339	90	370
Fall	168	340	36,870	303	90	340
Winter	168	310	36,440	283	100	310

Download English Version:

<https://daneshyari.com/en/article/11000335>

Download Persian Version:

<https://daneshyari.com/article/11000335>

[Daneshyari.com](https://daneshyari.com)