



## Knowledge and Beliefs Regarding Harmful Traditional Health Practices among University Staff: A Cross-Sectional Study

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### Abstract

**Background:** Certain customs have their roots in cultures, religions, or the counseling of new mothers by family members.

**Methods:** A descriptive cross-sectional study was conducted from December 1st, 2025 to March 30th, 2026. The study included a convenience sample of 200 male and female staff members from different colleges at the University of Basrah, Bab Al-Zubair campus. Data were collected using a closed-ended questionnaire consisting of two parts: socio-demographic characteristics and questions related to the staff's opinions about several traditional health practices. The Statistical Package for Social Sciences (SPSS) version 26 was used to analyze the data using both descriptive and inferential statistics.

**Results:** The results showed that most participants were university graduates (58.5%), while 23% had postgraduate degrees. The Participants demonstrated variable levels of knowledge, with persistence of several misconceptions. However, some incorrect beliefs were still present among the participants, such as using ash or flour to stop wound bleeding, hanging beads for neonatal jaundice, and using kohl to protect infants' eyes. Significant correlations were found between knowledge scores and some demographic variables, including age, gender, and marital status.

**Conclusion:** The study concluded that despite relatively high educational levels among participants, some harmful traditional health practices are still believed and practiced. Increasing awareness and providing accurate health education are essential to reduce the spread of these misconceptions.

### 1. Introduction

Due to poverty and poor levels of education, harmful traditional behaviors are carried out in many civilizations, particularly in developing nations. The link between the environment and human views toward nature is typically the source of traditional behaviors. Certain customs have their roots in nations, religions, or family members counseling new mothers (1). Since prehistoric times, people have utilized natural products, such as plants, animals, and marine organisms, to treat and alleviate illnesses (2).

For early people, using natural things as medicines surely posed a significant problem. When looking for food, that is highly likely. Poisonous plants were frequently eaten by early humans, who may have died as a result of vomiting, diarrhea, stupor, or other toxic effects. However, they were able to expand their understanding of natural remedies and edible ingredients in this way (3). Humans then discovered how to create new medications. Natural items are used in traditional remedies, which are quite significant. Natural goods are used in traditional medicine

and folk medicine, which have been used for hundreds or even thousands of years worldwide. They have consistently thrived in official medicine, which continues to be a storehouse of human knowledge (4).

Arabs are credited with creating and establishing the principles and guidelines of traditional medicine, particularly those who specialized in traditional and folk Arab medicine (5). Traditional medicine includes procedures and manual exercises used alone or in combination to cure, diagnose, prevent, or maintain happiness, as well as plant, animal, and mineral remedies, spiritual therapies, magic, and superstition. It also refers to all of the knowledge, skills, and approaches that are employed to maintain health, prevent, diagnose, improve, or treat physical, mental, and other ailments and are taken from indigenous theories, beliefs, and experiences of other cultures, whether or not they can be explained (6).

A yellowish or, less commonly, greenish coloring of the skin and sclera caused by elevated bilirubin levels is called jaundice, or icterus. Adult cases of jaundice are usually indicative of underlying conditions including aberrant heme metabolism, liver malfunction, or obstruction of the biliary tract (7, 8). While jaundice is uncommon in adults, it is frequent in babies, affecting an estimated 80% of them during the first week of life. The most typical signs of jaundice include dark urine, pale feces, and itching (9). Excessive disintegration of red blood cells may be the cause of elevated unconjugated bilirubin. The underlying cause of jaundice usually determines the course of treatment (10, 11).

The process during which a baby's first teeth—the deciduous teeth—emerge through their gums, usually in pairs, is known as teething. The infant experiences discomfort and anguish as the mandibular central incisors, the first primary teeth to erupt, typically appear between the ages of six and ten months (12). The eruption of all 20 teeth may take several years. The body releases hormones that lead to the death and separation of some gum cells, allowing the teeth to erupt. Teething does not appear to be a major cause of vomiting, diarrhea, or fever (13,14).

Every newborn has a varied threshold for pain. Usually starting three to five days before the tooth erupts, the sensations go away as soon as the tooth penetrates the skin (15, 16). Some people think that teething causes other symptoms, such as diarrhea, but there is no evidence to support this (17).

Measles is an airborne disease that spreads quickly from person to person through the coughs and sneezes of infected people. Symptoms usually start 10–12 days after interaction with an infected person and continue for 7–10 days. Common initial symptoms include fever, often more than 40 °C (104 °F), cough, runny nose, and itchy eyes (18). Koplik spots are little white patches that might develop inside the mouth two or three days after the onset of symptoms (19). A red, flat rash typically develops on the face three to five days after symptoms start, then spreads to the rest of the body (20).

Pneumonia (6%), middle ear infection (7%), and diarrhea (8% of cases) are common consequences (21). Measles-induced immunosuppression contributes to these (22). Seizures, blindness, or brain inflammation are less prevalent (23, 24). While there are historical reports from the early 20th century suggesting that red light therapy could "abort" or speed up the recovery of measles, there is no modern scientific evidence or clinical guidelines recommending "red dressing" (red clothing) to treat or relieve measles symptoms (25, 26).

A collection of middle ear inflammatory conditions is known as otitis media. Acute otitis media (AOM), a fast-onset illness that typically manifests as ear pain, is one of the two primary forms (27, 28). Otitis media with effusion (OME) is the other primary form (29). Middle ear inflammation that causes a tympanic membrane perforation and ear discharge is known as chronic suppurative otitis media (CSOM) (30, 31).

Inflammation of the conjunctiva, the thin, transparent membrane covering the inner eyelid and the white surface of the eye, is referred to as conjunctivitis, or pink eye (32, 33). While bacterial causes are more common in children, viruses are the most common infectious causes in adults (34, 35).

An injury to skin or other tissues brought on by heat, electricity, chemicals, friction, or ionizing radiation (like sunburn, which is produced by UV radiation) is referred to as a burn (36). Burns mostly happen at home or at work (36, 37). Superficial or first-degree burns are those that only damage the outermost layers of skin. The pain usually lasts around three days, and they appear red without blisters. A partial-thickness or second-degree burn occurs when the damage penetrates part of the underlying skin layer. Blisters are common and frequently cause excruciating agony. Scarring may result, and healing may take up to eight weeks (38). All of the skin's layers are

damaged in a full-thickness or third-degree burn. The burned area is often stiff and painless. Usually, healing doesn't happen on its own (39).

## 2. Research Methodology

**Study's Design:** At the University of Basrah Bab Al-Zubair campus, a descriptive cross-sectional study approach was used, involving a sample of 200 participants (male and female). The study started from December 1st, 2025, up to 30th March, 2026, in order to know the University of Basrah staff's opinions on some wrong health traditional practice at Bab Al-Zubair campus.

**Setting of the Study:** The current study was conducted at the Bab Al-Zubair campus of the University of Basrah.

**The Sample of the Study:** A convenience sample from the university staff, which consisted of 200 participants at Basrah University.

**Study's Instrument:** Data were collected using a closed-ended questionnaire. The questionnaire is divided into two sections. The first portion includes six questions about the population's sociodemographic characteristics, such as age, gender, college department, education level, marital status, and place of residence. The population's opinions toward several health customs are the subject of 15 questions in the second section of the survey. For the study, a standardized Likert scale with three points—agree, neutral, and disagree—was employed. Good (2.34-3), middling (1.67-2.33), and poor (1-1.66). 200 samples were given the pre-made questionnaire, which they read and completed. The researchers then collected the completed forms. Every form was examined and given a percentage score based on the correct usual response.

**Statistical Analysis:** Analysis was conducted using SPSS 26, so we measured: frequency, Percentage (%), Spearman correlation, and means.

**Ethical Approval:** In addition to receiving official approval from the Council of the College of Nursing at the University of Basrah, the study also received ethical approval from the committee overseeing the college's ethical research and was permitted to proceed. The researcher explained the purpose of the study to each participant. Oral consent was obtained from each participant before data collection.

## 3. Results

**Table 1:** Distribution of the study sample according to educational levels

| Educational levels          | Frequencies | Percentages |
|-----------------------------|-------------|-------------|
| Primary school graduation   | 7           | 3.5         |
| Secondary school graduation | 16          | 8           |
| University graduation       | 117         | 58.5        |
| Institute education         | 14          | 7           |
| Master degree               | 35          | 17.5        |
| Doctorate                   | 11          | 5.5         |
| <b>Total</b>                | <b>200</b>  | <b>100</b>  |

The table shows the distribution of the study sample according to educational levels. We found that 3.5% had primary school education, 8% had secondary school education, 7% had institution education, 58.5% had university education, 17.5 % were having Master graduation, and 5.5% had doctorate graduation.

**Table 2:** Distribution of the study sample according to workplace location

| Workplace                             | Frequencies | Percentages |
|---------------------------------------|-------------|-------------|
| College of administration and economy | 48          | 24          |
| College of education for girls        | 34          | 17          |
| College of Nursing                    | 34          | 17          |
| College of Arts                       | 32          | 16          |
| College of Fine Arts                  | 19          | 9.5         |
| College of Law                        | 10          | 5           |
| Others                                | 23          | 11.5        |
| <b>Total</b>                          | <b>200</b>  | <b>100</b>  |

The table showed the distribution of the study sample according to workplace; 24% of the sample were from the College of Administration and Economy, 17% of the sample were from the College of Education for Girls, 17%

were from the College of Nursing, 16% were from the College of Art, 9.5% were from Fine Arts, 5% were from the College of Law, and 11.5% were from other places in the Bab Al-Zubair campus at the University of Basrah.

**Table 3:** Distribution of the study sample according to Age intervals

| Age intervals in years | Frequencies | Percentages |
|------------------------|-------------|-------------|
| 20-29                  | 38          | 19          |
| 30-39                  | 68          | 34          |
| 40-49                  | 57          | 28.5        |
| 50-59                  | 37          | 18.5        |
| <b>Total</b>           | <b>200</b>  | <b>100</b>  |

The table showed that 19% of the sample were within the age interval 20-29 years, 34% of the sample were within the age interval 30-39 years, 28.5% of the sample were within the age interval 40-49 years, and 18.5% of the sample were within the age interval 50-59 years.

**Table 4:** Distribution of the study sample according to Gender

| Gender       | Frequencies | Percentages |
|--------------|-------------|-------------|
| Males        | 89          | 44.5        |
| Females      | 111         | 55.5        |
| <b>Total</b> | <b>200</b>  | <b>100</b>  |

The table shows the distribution of the study samples according to gender; 44.5% were males and 55.5% were females.

**Table 5:** Distribution of the study sample according to Residencies

| Residencies  | Frequencies | Percentages |
|--------------|-------------|-------------|
| Urban        | 150         | 75          |
| Rural        | 50          | 25          |
| <b>Total</b> | <b>200</b>  | <b>100</b>  |

The table shows the distribution of the study samples according to residency; 75% were urban, and 25% were rural.

**Table 6:** Distribution of the study sample according to Marital Status

| Marital status | Frequencies | Percentages |
|----------------|-------------|-------------|
| Single         | 77          | 38.5        |
| Married        | 123         | 61.5        |
| <b>Total</b>   | <b>200</b>  | <b>100</b>  |

The table shows the distribution of the study samples according to marital status; 38.5% were single, and 61.5% were married.

**Table 7:** Distribution of the study sample according to Scores

| Scores             | Frequencies | Percentages |
|--------------------|-------------|-------------|
| Less than 50 marks | 6           | 3           |
| 50-59 marks        | 31          | 15.5        |
| 60-69 marks        | 53          | 26.5        |
| 70-79 marks        | 45          | 22.5        |
| 80-89 marks        | 32          | 16          |
| 90 and above       | 33          | 16.5        |
| <b>Total</b>       | <b>200</b>  | <b>100</b>  |

The table showed the distribution of the study sample according to scores they get after corresponding the typical answers with staff answers to measure their levels of knowledge using the classical way in classifying the scores (marks), 3% were having less than 50 scores (fail to answer the questionnaire items) 15.5% were having 50-59 score (low level of knowledge), 26.5% were having 60-69 score (moderate level of knowledge), 22.5% were having 70-79 scores (good level of knowledge), 16% were having 80-89 scores (very good level of knowledge) and 16.5 % were having 90 and above (excellent level of knowledge).

**Table 8:** Distribution of the Study Sample according to questionnaire answers

| No | Item | AG<br>(1) | Neut.<br>(2) | DA<br>(3) | Means |
|----|------|-----------|--------------|-----------|-------|
|----|------|-----------|--------------|-----------|-------|

|    |                                                                                                          |     |    |     |      |
|----|----------------------------------------------------------------------------------------------------------|-----|----|-----|------|
| 1  | Ear dissection for a patient with Jaundice is an acceptable way of treating babies and adults            | 44  | 60 | 96  | 2.26 |
| 2  | Hanging Garlic pieces on the body of neonates is beneficial in decreasing neonatal Jaundice              | 64  | 46 | 90  | 2.13 |
| 3  | Hanging yellow jaundice beadle on the body of neonate had a role in decreasing the level of jaundice     | 153 | 31 | 16  | 1.31 |
| 4  | Teething process in infants can cause some symptoms like diarrhea, vomiting, fever, and loss of appetite | 50  | 56 | 94  | 2.22 |
| 5  | Red dressing for measles patients can relieve the disease symptoms                                       | 71  | 65 | 64  | 1.96 |
| 6  | Introduction of onion pieces on ear for managing ear diseases                                            | 80  | 53 | 67  | 1.93 |
| 7  | Using a pack of tea to treat eye infection                                                               | 31  | 49 | 120 | 2.44 |
| 8  | Skin cauterization for management of headache                                                            | 22  | 21 | 157 | 2.67 |
| 9  | Putting animal feces on umbilical cord stump in neonate to enhance healing process                       | 23  | 30 | 147 | 2.62 |
| 10 | Using animal urine in the treatment of skin diseases                                                     | 60  | 53 | 87  | 2.13 |
| 11 | Using tomato paste for managing burns at home                                                            | 50  | 52 | 98  | 2.24 |
| 12 | Using ash or flour to stop wound bleeding                                                                | 122 | 54 | 24  | 1.51 |
| 13 | Baby swaddling is useful for future body alignment                                                       | 118 | 49 | 33  | 1.57 |
| 14 | Using rice water in feeding infants                                                                      | 87  | 41 | 72  | 1.92 |
| 15 | Using Kohl for protecting infants' eyes from infections                                                  | 115 | 45 | 40  | 1.62 |

AG= agree, Neut.= neutral, DA = Disagree

The table showed the distribution of the study sample according to the questionnaire answers. Regarding the answer to question (1-Ear dissection for a patient with Jaundice is an acceptable way for treating babies and adults), 22% agreed with such a wrong tradition, 30% had a neutral answer, while 48% only disagreed. Question (2-Hanging Garlic pieces on the body of neonates is beneficial in decreasing neonatal Jaundice): 32% agreed with such a wrong tradition, 23% had a neutral answer, while 45% only disagreed. Regarding question (3-Hanging yellow jaundice beadle on the body of neonate had a role in decreasing level of jaundice), 76.5% agreed with such a wrong tradition, 15.5% had a neutral answer, while 8% only disagreed.

Question (4- Teething process in infants can cause some symptoms like diarrhea, vomiting, fever, and loss of appetite), 25% agreed with such a wrong tradition, 28% had a neutral answer, while 47% only disagreed. Question (5-Red dressing for measles patients can relieve the disease symptoms): 35.5% agreed with such a wrong tradition, 32.5% had a neutral answer, while 32% only disagreed. Question (6-Introduction of onion pieces on ear for managing ear diseases): 40% agreed with such a wrong tradition, 26.5% had a neutral answer, while 33.5% only disagreed. Question (7-Using a pack of tea to treat eye infection): 15.5% agreed with such a wrong tradition, 24.5% had a neutral answer, while 60% only disagreed.

Question (8-Skin cauterization for management of headache): 11% agreed with such a wrong tradition, 10.5% had a neutral answer, while 78.5% only disagreed. Question (9-Putting animal feces on umbilical cord stump in neonate to enhance healing process): 11.5% agreed with such a wrong tradition, 15% had a neutral answer, while 73.5% only disagreed. Question (10-Using animal urine in the treatment of skin diseases): 30% agreed with such a wrong tradition, 26.5% had a neutral answer, while 43.5% only disagreed.

Question (11-Using tomato paste for managing burns at home): 25% agreed with such a wrong tradition, 26% had a neutral answer, while 49% only disagreed. Question (12-Using ash or flour to stop wound bleeding): 61% agreed with such a wrong tradition, 27% had a neutral answer, while 12% only disagreed. Question (13-Baby swaddling is useful for future body alignment) 59%were agree with such a wrong tradition, 24.5% had a neutral answer, while 16.5% only disagreed. (14-Using rice water in feeding infants) Question 43.5% agreed with such a wrong tradition, 20.5% had a neutral answer, while 36% only disagreed. Question (15-Using Kohl for protecting infants' eyes from infections): 57.5% agreed with such a wrong tradition, 22.5% had a neutral answer, while 20% only disagreed.

Table 9: The Correlations of the scores with some variables

|                      | Scores | Age     | Gender  | Level  | Residence | Marital status |
|----------------------|--------|---------|---------|--------|-----------|----------------|
| Spearman Correlation | 1      | -0.181* | 0.222** | -0.105 | -0.026    | 0.526**        |
| Sig. (2-tailed)      |        | 0.010   | 0.002   | 0.137  | 0.713     | 0.000          |
| N                    | 201    | 201     | 194     | 201    | 201       | 201            |

The table showed the correlation of scores with demographic variables, using Spearman correlation. There was a significant correlation between scores and age at the 0.05 level, and there was high significant correlation between scores and both gender and marital status at the 0.01 level.

**Table 10:** Distribution of the study sample according to knowledge scores (No. 15 question)

| Score     | Classes  | Frequencies | Percentages |
|-----------|----------|-------------|-------------|
| 1-1.66    | Poor     | 4           | 26.6        |
| 1.67-2.33 | Moderate | 7           | 46.7        |
| 2.34-3    | Good     | 4           | 26.7        |

The table showed the distribution of the study sample according to knowledge scores; 26.6% had poor knowledge, 46.7 % had moderate knowledge, and 26.6 had good knowledge, so 73.3 % were having high level of knowledge.

#### 4. Discussion

The present study aimed to explore the opinions of University of Basrah staff regarding some common traditional health practices that may negatively affect health. Although the majority of the participants had relatively high educational levels, the findings showed that several incorrect health beliefs are still present.

According to the results, most of the participants were university graduates or held postgraduate degrees. Despite this, a noticeable proportion of the respondents agreed with some traditional practices that are not supported by scientific evidence. This suggests that educational level alone may not be sufficient to eliminate beliefs that are deeply rooted in cultural traditions.

The results of the knowledge scores indicated that most participants had moderate to good levels of knowledge about these practices. However, a smaller proportion of the sample showed low knowledge levels, which indicates that some misconceptions still exist among university staff.

The responses to the questionnaire also showed that certain traditional practices are still widely accepted. For example, a high percentage of participants believed in practices such as hanging yellow beads on neonates to reduce jaundice, using ash or flour to stop bleeding, and using kohl to protect infants' eyes. These practices are often inherited through generations and may be considered normal in some communities despite the lack of scientific evidence supporting them.

On the other hand, some practices such as skin cauterization for headache and placing animal feces on the umbilical cord stump were rejected by the majority of participants. This may indicate that awareness about some harmful practices has improved. The correlation analysis revealed significant relationships between knowledge scores and some demographic variables. Age showed a significant association with knowledge level, which may suggest that experience and exposure to information influence health awareness. Gender and marital status also showed significant relationships with the knowledge scores.

#### 5. Conclusions

More than half of the sample had university graduation, two-thirds of the sample were from urban areas, more than half were married, and more than half of the sample were within the ages between 30-49 years. About half of the sample answered the questionnaire with 60 and 79 evaluation marks, as with standard answers. Some wrong traditional health practices are still present among University of Basrah staff. Most participants demonstrated moderate to good knowledge about these practices. A noticeable proportion still believes in some harmful practices of the population. Demographic factors such as age, gender, and marital status were significantly associated with knowledge level.

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