

ORIGINAL ARTICLE

## Evaluation of self-competency of family physicians and family health workers in providing health services to Syrian children: an example from Ankara, Türkiye

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Received: 21.09.2023, Accepted: 05.03.2024

### Abstract

**Objective:** Türkiye is an immigrant-intensive country and primary health care services are the first health institution to apply for migrant children. In this research, it is aimed to evaluate how competent family physicians and family health workers working at where high Syrian migration population live consider themselves in providing health services to Syrian children.

**Methods:** This descriptive research was conducted among 224 family health physician and 250 family health workers in seven districts with a high migrant population in Ankara, Türkiye. Language knowledge and abroad experience was asked to the participants. The questionnaire included the participants' education on migrant health, their experience in providing health care to migrant people. Multinomial logistic regression analysis was used to evaluate factors associated with experiencing difficulties in serving immigrant children.

**Results:** Over the third-four of the family physicians (78.9%) and more than one-third of the family health workers (31.6%) knew at least one foreign language ( $p<0.001$ ). Cultural competence and taking immigrant health courses before graduation are associated with low level difficulty in providing child health care ( $p<0.05$ ). Higher cultural competency scale score is associated lower health service difficulty level in proving health care to immigrant children ( $p<0.05$ ).

**Conclusion:** Health professionals have difficulties in providing health services to immigrant children due to training on migrant health and cultural differences. Development of migrant health education is important to reduce the difficulties experienced by health professionals. Supporting foreign language education will facilitate health professionals to remove barriers in communication.

**Keywords:** Migrant, Child Health, Health Service, Cultural Competency

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**Cite This Article:** Özyürek D, Özcebe H. Evaluation of self-competency of family physicians and family health workers in providing health services to syrian children: an example from Ankara, Türkiye. Turk J Public Health 2024;22(1): 72-86.

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Turkish Journal of Public Health published by Cetus Publishing.



Turk J Public Health 2024 Open Access <http://dergipark.org.tr/tjph/>.

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## INTRODUCTION

Migration is a developing and differentiating phenomenon that has been affecting the whole world since ancient times. Today, there are 281 million immigrants who make up 3.6% of the world's population. Migration continues to increase over the years with changing conditions.<sup>1</sup>

Due to its location, Türkiye is in a region where immigration is intense. After the Syrian crisis in 2011, immigrants started to enter Türkiye. In Türkiye, which faced cultural, social and economic difficulties in the face of the density of Syrian immigrants, whose numbers reached approximately 3.1 million in 2024, the needs for the provision of shelter, education and health services for immigrants have emerged.<sup>2</sup> Syrians under the status of "Temporary Protection" in Turkey were first accommodated in camps, and later moved to other provinces. This situation brought along health, education and accommodation difficulties as well as social and cultural adaptation difficulties in different provinces.<sup>3</sup>

Among the immigrants, children, the elderly, those in poor health, disabled individuals, pregnant and postpartum women are among the groups that can be vulnerable for physical and psychological factors. Children are affected by migration in different ways through their parents and their environment. Immigrant children's health needs are heterogeneous, their health needs are shaped depending on the country they come from, and they may encounter obstacles in benefiting from their right to health.<sup>4</sup> There are racism, discrimination and integration difficulties with the host population. Poverty, poor housing conditions, and difficulty in accessing health services are risk factors for children.<sup>5</sup>

In the study evaluating the births of Syrian immigrants in Ankara between January 2013 and December 2014, it was stated that premature births and pathologies were detected more frequently in this patient group.<sup>6</sup> In a study evaluating the applications of Syrian immigrant children to tertiary pediatric intensive care in Ankara between March 2017 and March 2019, it was determined that the most common reason for admission was respiratory tract infections. This situation is associated with low socioeconomic level and crowded living conditions.<sup>7</sup> In a study where emergency and outpatient clinic applications of Syrian immigrant children were evaluated at a Training and Research hospital in Ankara in 2017, it was determined that emergency service applications of Syrian immigrant children constituted approximately 21% of all applications. It has been stated that recurrent emergency department visits may be due to difficulties in benefiting from primary health care services.<sup>8</sup>

In Türkiye, primary health care services for migrant children are provided by family health centers and migrant health centers in areas where immigrants weighted areas.<sup>9</sup> Health care expenses of immigrants are covered by the Government of Turkey.<sup>10</sup> In a qualitative study conducted with Family physicians serving Syrian immigrants under protection in Türkiye; it was stated that the expectation was similar to other patients. However, the negative impact of not knowing Arabic in serving patients was also emphasized.<sup>11</sup> Family physicians and family health workers also have problems in communicating with immigrant patients due to cultural differences as well as language barrier.<sup>12</sup> Difficulties in communicating with patients' relatives make it difficult to provide treatment and care

information.<sup>13</sup> When nurses with previous experience in providing healthcare services to immigrant patients in pediatric intensive care units from two different provinces in the east of our country and inpatient services are evaluated, their areas of difficulty were communication and treatment difficulties. Language differences and lack of interpreters are problematic areas in communication. In the field of treatment, lack of understanding of the treatment applied; therefore, delay in the treatment process and rejection of treatment are among the difficulties experienced. While the perspective on the child is emphasized within the scope of cultural differences, the differences in nutrition and general hygiene practices were revealed by the research participants.<sup>14</sup>

In the more than 10 years since the Syrian crisis, the problems they have experienced in the provision of health services to migrant patients continue.<sup>15</sup> In particular, it is important to define the difficulties in the health service procurement processes of immigrant children in child health services, which are offered intensively in primary care, in terms of developing practices and policies for this.<sup>16</sup> In this study, it is aimed to evaluate how competent family physicians and family health workers consider themselves in providing health services to Syrian children and the factors associated with this situation.

## METHODS

### **Research design, place and duration:**

For this descriptive study, it was aimed to evaluate the physicians and family health workers who worked at family health centres in the seven districts in Ankara between November 2021 – February 2022.

These districts are chosen for their central location and higher immigrant population. Republic of Türkiye Ministry of Health COVID-19 Scientific Research Application Approval was obtained in 26.06.2021. Ethics committee approval was obtained from Hacettepe University Non-Interventional Clinical Research Ethics Committee (approval number: 2021/14-47-Document Number 16969557-1607), at the data of 07.09.2021. Institutional approval was obtained from Republic of Türkiye Ministry of Health General Director of Public Health (Document Number: E-51381736-604.01.02) at the date of 15.10.2021 for the study. Volunteerism was accepted as the basis for participation in the research and participants. Written informed consent was obtained from the participants.

### **Sampling procedures and eligibility criteria:**

There are a total of twenty-five districts in Ankara Province, and this research is located in Ankara city center. It was carried out in seven districts. These districts are Altındağ, Çankaya, Etimesgut, Keçiören, Mamak, Sincan and Yenimahalle districts. The reasons for choosing these districts are central location and having a higher immigrant population. The entire physicians and family health workers in seven districts are targeted for this study.<sup>17</sup> The location and number of family health centers were accessed with Google Maps. Family health centers that were relocated or out closed were determined and the current addresses were accessed. As planned for the research, a total of 224 family health centers in the seven districts were visited for data collection. For the family health center professionals, 23.3% (n=224) of the physicians and 26.0% (n=250) of the family health workers agreed to participate in the study. Inclusion criteria

included agreeing participation of the study and work experience in the family health centre for at least three months. Exclusion criteria of the study was interruption of the survey response.

**Questionnaire Design:** For data collection, the questionnaire designed for family physicians and family health workers included the questions aimed to learn having any lecture on migrant health in undergraduate educational and in-service training, experience professional working experience with migrant people, experience in working at primary health care, and their perception on migrants' child health status. The physicians and family health workers were also asked if they knew any foreign language other than Turkish. Additionally, living abroad experience was asked to the participants.

The physicians and family health workers were asked if they have difficulty while providing child health care services to migrant children and they evaluated themselves with scoring. For scoring, the participants were asked to score 5-point scale, as 1 point for the least difficulty and 5 point for the highest difficulty. They were also asked which child health services were difficult to provide to the migrant children

"Primary Health Care Professionals' Cultural Competency Scale (PHCP-CCS)" which was developed by Perng and Watson in 2012 and adapted by Gözüm et al. in 2020, was included in the questionnaire. The scale was consisted of 20 items under three subscales. The scale in Turkish was found as reliable and valid among health care professionals.<sup>18</sup> The Cronbach Alpha coefficient for the scale was calculated as 0.96 for the total score in our study.

The pilot study was conducted with 7 family medicine residency assistants and 2 pediatrics residency assistants. Survey response duration took approximately 15 minutes. After the pilot study, necessary arrangements were made and the data collection form was finalized.

**Data Collection Method:** In the study, data collection forms were delivered to the family health centers by visits of the researcher. Family physicians and family health workers who agreed to participate in the research, completed their survey on their own. Data collection forms distributed to employees were collected during the visit the next day. For the excuses of the participants, including field service, annual leave etc., suitable survey form retrieval dates were suggested. In data collection form retrieval visits, the family physicians and family health workers that could not be reached at first visit were included on voluntary basis. The data collection process took place during the COVID-19 pandemic period. The researcher was vaccinated in accordance with the Ministry of Health COVID-19 vaccine recommendations. During the transportation to family health centers and visits, distance rules were followed and masks were used.

**Statistical Analysis:** IBM Statistics Package for Social Sciences (SPSS ver. 23.0) program was used to evaluate the data.

Self-evaluations of family physicians and family health workers regarding the degree of difficulty in providing services to immigrant patients were taken as a minimum of 1 point and a maximum of 5 points. Difficulty at low level was determined as 1 and 2 points, at medium level as 3 points, at high level as 4 and 5 points. In the multinomial logistic

regression analysis, the evaluations were made by comparing the high difficulty group with the other groups. For the self evaluation score, 1 point indicates the least difficulty and 5 point indicates the highest difficulty.

For the “Primary Health Care Professionals’ Cultural Competency Scale (PHCP-CCS)” scores evaluation, there are five options for the participants; “strongly agree”, “agree”, “undecided”, “disagree”, “strongly disagree”. For the 20 items, “strongly disagree” takes 1 point and according to this “strongly agree” takes 5 point. A participant can take scores between 20-100 for the scale. Higher score indicates the higher cultural competency level.

Descriptive statistics were determined as numbers and percentages. The distribution data were determined as means, standard deviation, median, minimum and maximum value. Kolmogorov-Smirnov was used to determine whether or not the variables were distributed normally. The Mann-Whitney U test was used for the comparison of independent two-group continuous variables that did not fit into the normal distribution, and the Kruskal Wallis test was used for comparisons with more than two independent groups. For statistical significance, cases with a Type 1 error value ( $\alpha$ ) below 5% were considered significant.

The difference between groups for categorical variables was evaluated with the Chi-Square

test. In the Chi-Square test, in which variables with more than two categories were included, statistically different eyes were determined by comparing the column percentages, and Bonferroni correction was made, and p value was given since multiple comparisons were made.

## RESULTS

Most of the family health workers (98.4%) were women, but controversially nearly one in two physicians (51.6%) were women ( $p < 0.001$ ). The mean age of the participants was  $42.6 \pm 9$  (sd), the median age was 42, the youngest was 23, and the oldest was 67. In the distribution of family health workers by age groups, it was observed that they were younger ( $p < 0.001$ ) (Table 1).

Over the third-four of the family physicians (78.9%) and more than one-third of the family health workers (31.6%) knew at least one foreign language ( $p < 0.001$ ). The physicians were abroad for more than one month than the family health workers (respectively, 11.7% and 2.8%,  $p < 0.001$ ) (Table 1). The most known foreign language among the participants is English (96.0%) (not shown in the table).

Only 3.0% ( $n=14$ ) of the participants stated that they took undergraduate migration health course. Most of the participants (92.4%) stated that they did not take postgraduate migration health course (Table 2).



**Table 1.** Distribution of Participants by Individual Characteristics (Ankara, 2022)

| Individual Characteristics                  | Family Physician |       | Family Health Worker |       | Total |       | p value |
|---|------------------|-------|----------------------|-------|-------|-------|---------|
|   | n                | %     | n                    | %     | n     | %     |         |
| <b>Gender</b>                               |                  |       |                      |       |       |       |         |
| Male  | 108              | 48.4  | 4                    | 1.6   | 112   | 23.7  | <0.001  |
| Female                                      | 115              | 51.6  | 245                  | 98.4  | 360   | 76.3  |         |
| Total                                       | 223              | 100.0 | 249                  | 100.0 | 472   | 100.0 |         |
| <b>Age</b>                                  |                  |       |                      |       |       |       |         |
| 34 and under                                | 24               | 11.4* | 66                   | 27.6* | 90    | 20    | <0.001  |
| 35-54                                       | 140              | 66.4  | 170                  | 71.1  | 310   | 68.9  |         |
| 55 and above                                | 47               | 22.3* | 3                    | 1.3*  | 50    | 11.1  |         |
| Total                                       | 211              | 100.0 | 239                  | 100.0 | 450   | 100.0 |         |
| <b>Knowing a foreign language</b>           |                  |       |                      |       |       |       |         |
| Yes   | 176              | 78.9  | 79                   | 31.6  | 255   | 53.9  | <0.001  |
| No  | 47               | 21.1  | 171                  | 68.4  | 218   | 46.1  |         |
| Total                                       | 223              | 100.0 | 250                  | 100.0 | 473   | 100.0 |         |
| <b>Being abroad for more than one month</b> |                  |       |                      |       |       |       |         |
| Yes   | 26               | 11.7  | 7                    | 2.8   | 33    | 7.0   | <0.001  |
| No  | 197              | 88.3  | 242                  | 97.2  | 439   | 93.0  |         |
| Total                                       | 223              | 100.0 | 249                  | 100.0 | 472   | 100.0 |         |

\*Cells causing statistically significant difference

-Chi Square test-Bonferroni Adjustment

**Table 2.** Distribution of Family Physicians and Family Health Workers Participating in the Study by Education in the Field of Immigrant Health and their Experience in Health Service Delivery (Ankara, 2022)

|   | Family Physician |       | Family Health Worker |       | Total |       | p value |
|---|------------------|-------|----------------------|-------|-------|-------|---------|
|   | n                | %     | n                    | %     | n     | %     |         |
| <b>Undergraduate Migration Health Course Taking</b>           |                  |       |                      |       |       |       |         |
| Yes   | 5                | 2.2   | 9                    | 3.6   | 14    | 3.0   | 0.250   |
| No  | 202              | 90.6  | 214                  | 85.6  | 416   | 87.8  |         |
| Don't remember  | 16               | 7.2   | 27                   | 10.8  | 43    | 9.1   |         |
| Total   | 223              | 100.0 | 250                  | 100.0 | 473   | 100.0 |         |
| <b>Undergraduate Migration Health Practical Course Taking</b> |                  |       |                      |       |       |       |         |
| Yes   | 5                | 2.2   | 7                    | 2.8   | 12    | 2.5   | 0.558   |
| No  | 212              | 95.1  | 232                  | 92.8  | 444   | 93.9  |         |
| Don't remember  | 6                | 2.7   | 11                   | 4.4   | 17    | 3.6   |         |
| Total   | 223              | 100.0 | 250                  | 100.0 | 473   | 100.0 |         |

**Table 2. (countinued)** Distribution of Family Physicians and Family Health Workers Participating in the Study by Education in the Field of Immigrant Health and their Experience in Health Service Delivery (Ankara, 2022)

| <b>Postgraduate Migration Health Course Taking</b>                    |     |       |     |       |     |       |              |
|---|-----|-------|-----|-------|-----|-------|--------------|
| Yes   | 10  | 4.5   | 11  | 4.4   | 21  | 4.4   | 0.300        |
| No  | 202 | 91.0  | 234 | 93.6  | 436 | 92.4  |              |
| Don't remember  | 10  | 4.5   | 5   | 2.0   | 15  | 3.2   |              |
| Total   | 222 | 100.0 | 250 | 100.0 | 472 | 100.0 |              |
| <b>Prior Migrant Health Service Experience</b>                        |     |       |     |       |     |       |              |
| Yes   | 35  | 15.7  | 48  | 19.4  | 83  | 17.4  | 0.289        |
| No  | 188 | 84.3  | 199 | 80.6  | 387 | 81.6  |              |
| Total   | 223 | 100.0 | 247 | 100.0 | 470 | 100.0 |              |
| <b>Working Duration in Experienced Unit**</b>                         |     |       |     |       |     |       |              |
| <1 year   | 14  | 40.0* | 7   | 14.9* | 21  | 25.6  | <b>0.025</b> |
| 1-4 years   | 15  | 42.9  | 24  | 51.1  | 39  | 47.6  |              |
| 5-15 years  | 6   | 17.1  | 16  | 34.0  | 22  | 26.8  |              |
| Total   | 35  | 100.0 | 47  | 100.0 | 82  | 100.0 |              |
| <b>Benefiting from In-Service Training on Migrant Child Health***</b> |     |       |     |       |     |       |              |
| Insufficient  | 120 | 78.9  | 137 | 72.5  | 257 | 75.4  | 0.107        |
| Partially sufficient  | 25  | 16.4  | 35  | 18.5  | 60  | 17.6  |              |
| Sufficient  | 7   | 4.6   | 17  | 9.0   | 24  | 7.0   |              |
| Total   | 152 | 100.0 | 189 | 100.0 | 341 | 100.0 |              |

\*Cells causing statistically significant difference

\*\*Of the participants (n=83) who had experience of migrant health service before the unit, 82 people answered this question.

\*\*\*Participants who stated that they did not receive migrant health training after graduation were excluded from the evaluation in benefiting from in-service training on migrant child health.

Note: 224 family physicians and 250 family health workers participated in the study. Participants who did not answer the question were excluded from the evaluation in the table.

-Chi Square test-Bonferroni Adjustment

More than half of the participants (57.8%) stated that they had difficulties in maternity screening. Family physicians stated less difficulty rather than the family health workers for breastfeeding education ( $p < 0.05$ ) (Table 3).

Nearly half of the participants (46.8%) stated that their patients had difficulty in complying with their appointments. In screenings of metabolic diseases, 59.3% of the participants stated that they had difficulties. Family physicians stated less difficulty rather than the family health workers for follow-up of the vaccination ( $p < 0.05$ ). In child nutrition

education, one out of two participants (58.7%) stated that they had difficulties. While unawareness of this issue is 9.2% among family physicians, it is 3.0% among family health workers ( $p < 0.05$ ). The increased follow-up/training time allocated to the migrant patient is a difficult situation for more than half of the participants. In the treatment outpatient clinic services, one of the two family physicians had difficulties in providing information about the treatment, explaining the use of medication, additionally prolonging the referral and examination period (Table 3)

**Table 3.** Participants Percentage Distribution of the Responses Regarding the Situations of Difficulty Experiencing Health Care Services to Immigrants (Ankara, 2022)

| Health Service Factors                                  | Family Physician |                       |                 |                   | Family Health Worker |                       |                 |                   | Total |                       |                 |                   | p value      |
|---|------------------|-----------------------|-----------------|-------------------|----------------------|-----------------------|-----------------|-------------------|-------|-----------------------|-----------------|-------------------|--------------|
|   | n                | Not having difficulty | I am not aware. | Having difficulty | n                    | Not having difficulty | I am not aware. | Having difficulty | n     | Not having difficulty | I am not aware. | Having difficulty |              |
| <b>Preventive Health Services</b>                       |                  |                       |                 |                   |                      |                       |                 |                   |       |                       |                 |                   |              |
| Maternity screening                                     | 174              | 37.0                  | 8.0             | 54.6              | 203                  | 35.5                  | 3.9             | 60.6              | 377   | 36.4                  | 5.8             | 57.8              | 0.185        |
| Breastfeeding education                                 | 174              | 38.5                  | 12.1*           | 49.4*             | 202                  | 35.1                  | 3.5*            | 61.4*             | 376   | 36.7                  | 7.4             | 55.9              | <b>0.003</b> |
| Compliance with outpatient appointment                  | 174              | 48.9                  | 6.3             | 44.8              | 202                  | 41.6                  | 9.9             | 48.5              | 376   | 44.9                  | 8.3             | 46.8              | 0.244        |
| Screenings for metabolic diseases                       | 174              | 40.8                  | 5.2             | 54.0              | 202                  | 31.6                  | 4.5             | 63.9              | 376   | 35.9                  | 4.8             | 59.3              | 0.150        |
| Vaccination screening                                   | 172              | 40.7                  | 6.4*            | 52.9              | 203                  | 36.0                  | 2.0*            | 62.1              | 375   | 38.1                  | 4.0             | 57.9              | <b>0.040</b> |
| Child feeding education                                 | 173              | 37.0                  | 9.2*            | 53.8              | 202                  | 34.2                  | 3.0*            | 62.8              | 375   | 35.4                  | 5.9             | 58.7              | <b>0.020</b> |
| Increased follow-up/training time for migrant patient   | 171              | 34.5                  | 9.4             | 56.1              | 200                  | 29.0                  | 11.5            | 59.5              | 371   | 31.5                  | 10.5            | 58.0              | 0.480        |
| Drug treatment applications (IM/IV drug administration) | 173              | 48.0*                 | 7.5*            | 44.5              | 202                  | 31.7*                 | 16.3*           | 52.0              | 375   | 39.2                  | 12.3            | 48.5              | <b>0.001</b> |
| <b>Outpatient health services</b>                       |                  |                       |                 |                   |                      |                       |                 |                   |       |                       |                 |                   |              |
| Lab test request  | 137              | 62.0                  | 6.6             | 31.4              |                      |                       |                 |                   |       |                       |                 |                   |              |
| Prescribing   | 172              | 64.0                  | 4.0             | 32.0              |                      |                       |                 |                   |       |                       |                 |                   |              |
| Providing information about treatment                   | 173              | 44.5                  | 4.0             | 51.4              |                      |                       |                 |                   |       |                       |                 |                   |              |
| Explaining medication use                               | 173              | 42.2                  | 5.2             | 52.6              |                      |                       |                 |                   |       |                       |                 |                   |              |
| Referral of a Patient                                   | 173              | 43.9                  | 5.8             | 50.3              |                      |                       |                 |                   |       |                       |                 |                   |              |
| Increased inspection time                               | 173              | 43.4                  | 4.0             | 52.6              |                      |                       |                 |                   |       |                       |                 |                   |              |

\*Cells causing statistically significant difference Note: 224 family physicians and 250 family health workers participated in the study. Participants who did not answer the question were excluded from the evaluation in the table.

-Chi Square test-Bonferroni Adjustment

The cultural competence scale score of the participants who knew a foreign language and who took immigrant health course was found to be higher than the participants who did not

know a foreign language and who did not take the course( $p < 0.05$ ). The cultural competence scale scores of the participants who have more registered immigrant patients in their unit are



higher ( $p<0.05$ ). Among the participants, the cultural competence scale of those who had a low level of difficulty in providing service to immigrant patients was higher than those who had a high level of difficulty ( $p<0.01$ ). (Table 4).

Participants who knew a foreign language stated that they had less difficulty while

serving immigrant patients than participants who did not know a foreign language ( $p<0.05$ ). Participants who took a migrant health course before graduation or in-service training stated that they had less difficulty in providing health services to migrant patients compared to those who did not ( $p<0.05$  and  $p<0.05$ ) (Table 4).

**Table 4.** Distribution of Cultural Competence Scale Scores of Family Physicians and Family Health Workers Participating in the Study by Education/Service Characteristics of the Participants (Ankara, 2022)

|  | Cultural Competence Scale Score |                    |              | Self-Evaluation Scores of Difficulty |                  |              |
|--|---------------------------------|--------------------|--------------|--------------------------------------|------------------|--------------|
|  | n                               | Median (Min-Max)   | p value      | n                                    | Median (Min-Max) | p value      |
| <b>Knowing a Foreign Language</b>                                  |                                 |                    |              |                                      |                  |              |
| Yes  | 236                             | 65.0(20.0-100.0)   | <b>0.006</b> | 228                                  | 4.0(1.0-5.0)     | <b>0.018</b> |
| No   | 202                             | 60.0 (20.0-100.0)  |              | 183                                  | 4.0(1.0-5.0)     |              |
| <b>Being Abroad for More than One Month</b>                        |                                 |                    |              |                                      |                  |              |
| Yes  | 33                              | 66.0 (22.0-100.0)  | 0.05         | 33                                   | 4.0(1.0-5.0)     | 0.123        |
| No   | 404                             | 61.0 (20.0-100.0)  |              | 377                                  | 4.0(1.0-5.0)     |              |
| <b>Pregraduate Migration Health Theoretical Course Taking</b>      |                                 |                    |              |                                      |                  |              |
| Yes  | 13                              | 70.0 (54.0-91.0)*  | <b>0.034</b> | 12                                   | 3.0(2.0-5.0)*    | <b>0.025</b> |
| No   | 387                             | 61.0 (20.0-100.0)* |              | 362                                  | 4.0(1.0-5.0)*    |              |
| Don't remember   | 38                              | 62.5 (38.0-100.0)  |              | 37                                   | 4.0(1.0-5.0)     |              |
| <b>Pregraduate Migration Health Practical Course Taking</b>        |                                 |                    |              |                                      |                  |              |
| Yes  | 12                              | 71.0 (21.0-100.0)  | 0.07         | 11                                   | 3.0(2.0-5.0)     | 0.222        |
| No   | 411                             | 61.0 (20.0-100.0)  |              | 384                                  | 4.0(1.0-5.0)     |              |
| Don't remember   | 15                              | 60.0 (49.0-84.0)   |              | 16                                   | 4.0(2.0-5.0)     |              |
| <b>In-service Migration Health Course Taking</b>                   |                                 |                    |              |                                      |                  |              |
| Yes  | 18                              | 67.0 (21.0-91.0)   | 0.12         | 18                                   | 3.0(2.0-5.0)*    | <b>0.001</b> |
| No   | 407                             | 61.0 (20.0-100.0)  |              | 379                                  | 4.0(1.0-5.0)*    |              |
| Don't remember   | 12                              | 65.0 (41.0-84.0)   |              | 13                                   | 4.0(2.0-5.0)     |              |
| <b>Number of Migrant Patients Registered in Family Health Unit</b> |                                 |                    |              |                                      |                  |              |
| Under 500 patients   | 358                             | 61.0 (20.0-100.0)* | <b>0.035</b> | 337                                  | 4.0(1.0-5.0)     | 0.736        |
| 500-1499 patients  | 31                              | 66.0 (48.0-85.0)   |              | 28                                   | 4.0(2.0-5.0)     |              |
| 1500 patients and over   | 13                              | 70.0 (41.0-86.0)*  |              | 13                                   | 4.0(2.0-5.0)     |              |

\*Cell causing statistically significant difference  
-Mann Whitney U and Kruskal Wallis tests

Participants having postgraduate course on migrant health, if they stated “a low level of difficulty in providing health services to migrants” 8.8 times higher than the participant with “a high level difficulty” and the odds for moderate level of difficulty is 11,7 times higher ( $p<0.05$ ). The participants having higher cultural competence score, who

stated that they had a low level of difficulty in serving immigrant patients was 1.083 times higher than those who had a high level of difficulty ( $p<0.001$ ); participants who stated that they had moderate difficulty in serving immigrant patients were 1.049 times higher than reference group ( $p<0.001$ ) (Table 5).

**Table 5.** Evaluating the Relationship of Participants’ Self-Assessment of Serving Migrant Patients with Participants’ Education and Service Characteristics (Ankara, 2022)

|  | Coefficient ( $\beta$ ) | Standart Error | p value | Odds   | Confidence Intervals |
|--|-------------------------|----------------|---------|--------|----------------------|
| <b>Constant</b>  | -7.666                  | 1.138          | <0.001  |        |                      |
| <b>Being a Family Physician/<br/>Family Health Worker*</b> |                         |                |         |        |                      |
| Low level of difficulty **                                 | 0.642                   | 0.449          | 0.152   | 1.901  | 0.789-4.580          |
| Moderate level of difficulty***                            | 0.344                   | 0.280          | 0.219   | 1.410  | 0.815-2.440          |
| <b>Knowing a Foreign Language *</b>                        |                         |                |         |        |                      |
| Low level of difficulty **                                 | -0.211                  | 0.455          | 0.642   | 0.810  | 0.332-1.973          |
| Moderate level of difficulty***                            | 0.344                   | 0.280          | 0.238   | 0.718  | 0.414-1.245          |
| <b>Pregraduation Migration<br/>Health Course Taking*</b>   |                         |                |         |        |                      |
| Low level of difficulty **                                 | 0.752                   | 1.001          | 0.453   | 2.121  | 0.298-15.096         |
| Moderate level of difficulty***                            | 0.693                   | 0.745          | 0.352   | 1.999  | 0.464-8.605          |
| <b>Postgraduation Migration<br/>Health Course Taking*</b>  |                         |                |         |        |                      |
| Low level of difficulty **                                 | 2.186                   | 0.948          | 0.021   | 8.898  | 1.387-57.080         |
| Moderate level of difficulty***                            | 2.467                   | 0.722          | 0.001   | 11.792 | 2.864-48.544         |
| <b>Cultural Competence Scale<br/>Score*</b>                |                         |                |         |        |                      |
| Low level of difficulty **                                 | 0.079                   | 0.015          | <0.001  | 1.083  | 1.051-1.115          |
| Moderate level of difficulty***                            | 0.048                   | 0.009          | <0.001  | 1.049  | 1.030-1.069          |

Reference: Highly Difficult (Score 4 and Score 5)

\* Low Difficulty (Score 1 and Point 2)

\*\* Moderately Difficult (Score 3)

$R^2=0.164$  (Cox-Snell).  $0.204$  (Nagelkerke). Model  $X^2(10) = 72.951$   $p<0.001$

## DISCUSSION

Language differences and cultural differences play an important role in immigrant health services. Defeating the language barrier between the healthcare professional and the patient makes healthcare service easier. Increasing the cultural competence of

healthcare personnel improves migrant health service delivery.<sup>19</sup> The participants with high cultural competence scores have lower difficulty to provide health services to migrants than the others with low cultural competence scores. Enhancing the cross-cultural communication skills for healthcare

service is evaluated as a fundamental part of education.<sup>20</sup> We found that knowing a foreign language, taking course on migrant health before graduation and working at a primary health care unit with a high migrant population have relations with cultural competence scores. In the study in which Yilmaz evaluated the cultural competence level of nurses in Gaziantep in 2020, similarly, the cultural competence level of the participants who speak a foreign language was found to be higher than those who do not.<sup>21</sup> Türker, in a study evaluating 115 nurses working in family health centers in Istanbul, determined that the level of cultural competence of nurses who speak a foreign language is higher than those who do not.<sup>22</sup> In this context, knowing a foreign language was evaluated as a factor for the level of cultural competence, similarly with these studies in the country. It is important to integrate programs that support foreign language learning into education, to reduce the difficulties experienced due to language differences in communication with different cultures, and to create and support course/program content in medical faculties and health sciences faculties for different languages before graduation.

The cultural competence scale scores of the participants who took immigrant health course before graduation and had more registered immigrant patients in their unit were higher ( $p < 0.05$ ). In the study conducted by Yilmaz et al. in 2017 in which family health workers were evaluated in İzmir, it was stated that education and migrant patient service experience were effective to provide health services.<sup>23</sup> Jowsey (2019) revealed that it is important to improve the knowledge and attitude of health professionals towards cultural differences in the provision of health

services that respond to cultural differences.<sup>24</sup> Before graduation, the inclusion of immigrant health in the curriculum is supported in terms of improving immigrant health.<sup>20,25</sup> It is suggested that the content that will improve the knowledge and behaviour towards the development of service delivery that responds to different cultural characteristics should be included in the training program effectively.

Living abroad has a positive effect on people's experience of intercultural differences as well as raising their awareness of their own personalities and aims.<sup>20</sup> In a study evaluating nursing faculty students in Australia, it was found that 89.7% of them had travel experience abroad, and 19.3% had internship experience abroad.<sup>26</sup> In this study, it was evaluated that the frequency of family physicians and family health workers staying abroad for more than one month was lower than the examples in other countries.<sup>27,28,29</sup> Ensuring that students gain experience in terms of academic and social development in different countries by supporting student mobility abroad could support a positive approach to different cultures.

The participants have difficulty to provide maternal and child health care to the migrant people. More than half of the participants (57.8%) stated that they had difficulties in pregnancy follow-up. Studies have shown that immigrants have difficulties in pregnancy follow-up due to the fact that health professionals do not know Arabic and that they have cultural differences.<sup>30,31,32</sup> Batista et al. reduce health inequalities in antenatal follow-ups; therefore, they emphasize that it causes complications by not defining the risks during pregnancy. The lack of easy access to health services may be associated

with deepening health inequalities among immigrant individuals.<sup>33</sup>

Breastfeeding education is very important for the babies to be healthy. In our study, approximately one out of two participants (55.9%) stated that they had difficulty in breastfeeding education. In a study (2019) evaluating the people involved in the breastfeeding education and support program in Bangladesh refugee camps, it was determined that more than half of the participants (58.3%) had difficulties in the education and support process due to communication and cultural differences.<sup>34</sup> In our study, family health workers had more difficulties than family physicians ( $p < 0.05$ ). In breastfeeding education, family health workers have more communication with the patient than family physicians in terms of communication and guidance.<sup>35</sup> The reason can be explained with cultural perspective; most of the family health workers are female, they are more preferred by immigrant patients for questions and counselling.<sup>36</sup>

Metabolic disease screenings, 59.3% of the participants stated that they had difficulties. In their qualitative research, Kroening et al. defined low education level, difficulties in communication, beliefs/values, health perception, traditional health practices in immigrant families as important factors in benefiting from childhood screening services.<sup>37</sup> While therapeutic health services were more on the agenda in Syria before the war, preventive health services and screening programs were not included in national plans.<sup>38</sup> This may be related to the low compliance and participation of families in screening programs.

Family physicians have less difficulty in vaccination follow-up and child nutrition education than family health workers. This situation can be explained by the fact that the duties of family health workers in the childhood vaccination program are reminding of the vaccinations of immigrant children, arranging their appointments and administering the vaccine are in the job description of the family health worker.<sup>39</sup> Çelebi (2019) evaluated the language barrier as an important factor in the difficulty of family health workers, while nutritional recommendations are given by family physicians and family health workers during childhood follow-up.<sup>40</sup>

In outpatient services, one of the two family physicians had difficulties in providing information about the treatment plan, explaining drug use, and prolonging the referral and examination period. Delilovic et al. stated that in addition to language differences, the lack of sufficient information about the health system of immigrant individuals and the difficulty of expressing during the referral cause the examination process to be prolonged.<sup>41</sup> Difficulty in communication due to language difference could be considered as a factor that prolongs the examination period, as it makes communication with the healthcare professional difficult during the examination.

In the advanced analysis model established at the end of descriptive analyses, taking in-service migration health training and higher cultural competency score is associated with low levels of difficulty in migrant health services. Taking migration health course and cultural differences have been evaluated as facilitating factors.<sup>42</sup> Supporting health professionals in providing services

to migrants to gain an attitude that accepts cultural differences improves the quality of service as well as their knowledge, skills and competencies.

In this study, it has been found important that health workers have high scores in the cultural competence scale and receiving in-service training on migrant health in order to not have difficulties while providing services to immigrants.

#### **Study Limitations and Strengths:**

One of the strengths of the research is to reach the family physician and family health worker and ask about their interactions with the immigrant population and to evaluate themselves. During this interaction, health professionals' views on child health services of the immigrant population, as well as cultural differences that will affect service delivery, were learned in detail.

Districts farther from the centre could not be evaluated. Difficulties arose as the research was conducted during the COVID-19 pandemic. Family physicians and family health workers who were positive for COVID-19 in family health centres could not be reached. During the visits to family health centres, it was learned that there were family physicians and family health workers who had a health report due to chronic diseases and did not work in that period.

There were family physicians and family health workers who stated that they could not participate in the study due to the patient density in family health centres, since the data collection period was in the winter period and the applications were increased due to upper respiratory tract infections. For this reason, the results of the research cannot be

generalized to the population and will not show causality because they only reflect the research group.

For the researches in future, qualitative and quantitative researches in migrant health centers are recommended to evaluate the options of migrant patients about difficulties faced during health service admissions and treatment processes.

## **CONCLUSION**

According to the study findings, the health professionals that took migration health education face less challenges than others. For this reason, it is recommended that family physicians and family health workers should receive training on immigrant health. Interventions within the scope of migration health education for family physicians and family health workers can be planned both for under-graduate period and in the post-graduate period. Health care providers are should be encouraged to learn foreign language and have experience abroad experience during their education. Planning in-service theoretical and practical training that increases cultural competence is recommended to improve immigrant health services.

## **ACKNOWLEDGEMENTS**

**Conflict of interest:** The authors declare no conflict of interest.

**Financial Support:** The study had no external financial support.

**Ethical Approval:** Hacettepe University Non-Interventional Clinical Research Ethics Committee approved the study (approval number: 2021/14-47-Document Number 16969557-1607)



**Authorship Contributions:** Concept: DÖ, HÖ Design: DÖ, HÖ Supervising: HÖ Data collection and entry: DÖ, Analysis and interpretation: DÖ, HÖ Literature search: DÖ, HÖ Writing: DÖ, HÖ Critical review: HÖ

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