

EVALUATION OF THESES ON HEALTH LITERACY CONDUCTED BY FAMILY MEDICINE RESIDENCY TRAINEES

Yusuf KARAYUREK ¹

¹ Esref Dincer Family Health Center, Bursa, TURKEY

36

ABSTRACT

Aim: In this study, we aimed to investigate the general characteristics of thesis studies on health literacy given to family medicine residents and the conversion of theses into publications.

Methods: The research was carried out in August 2022. The data for the research was obtained from the Council of Higher Education National Thesis Center. All theses on 'Health Literacy' were scanned by family medicine specialty students in Turkey without choosing a date. The keywords 'sağlık okuryazarlığı' (health literacy in Turkish) were used during the screening and the words 'health literacy' were used in a second scan. Among the identified theses, family medicine theses are listed.

Results: In this study, it was observed that there was an increasing trend in the number of theses on health literacy as a family medicine specialty thesis. The publication status of the theses on health literacy of family medicine residents who received specialization training at the university hospitals was lower than that of the family medicine residents at the training and research hospitals ($p=0.015$). When the health literacy scales used in the thesis research were examined, it was seen that the 3 most commonly used scales were TSOY-32, ASOY-TR, and Adult Health Literacy Scale.

Conclusions: In conclusion, an increase in the number of studies on health literacy in primary care is an expected situation. The rate of publication status of the theses on health literacy in family medicine is moderate. It can be supposed that the chance to publish health literacy research theses will increase with the increase in theses conducted in the field. It will be valuable to use a generally preferred scale in the studies for a better comparison of the accumulated data.

Keywords: family medicine, health literacy, HLS-EU, NVS, primary care, residency trainee

Corresponding Author: Yusuf KARAYUREK ykarayurek@gmail.com

Received: August 27, 2022; **Accepted:** August 31, 2021; **Published Online:** August 31, 2021

Cite this article as: Karayurek, Y. (2022). Evaluation of Theses on Health Literacy Conducted by Family Medicine Residency Trainees. *European Health Literacy Journal* 2(2), 36-43.



Introduction

According to the WONCA definition, 'Family Medicine / General Practice is an academic and scientific discipline and a primary care oriented clinical specialty with its own unique educational content, research, evidence base and clinical practice' (1). When family medicine service areas are examined, a wide range of internal, surgical and psychological aspects are encountered from prenatal to postmortem. Family physicians also exchange ideas with all other medical units on the protection, improvement and treatment of their patients' health. Family physicians are also the advocates for their patients when it comes to consultation-liaison (2).

During the family medicine residency training, specialty students are given thesis topics, primarily in the student's own area of interest, and also within the framework of the needs of modern medicine, which overlap with family medicine practices. Thesis topics may primarily be related to the clinical branches in which the residency student receives rotation training (3). Survey studies constitute an important part of these thesis topics. Life satisfaction surveys and other surveys can be given as examples (4). Health literacy, which has increased in popularity recently, has reached a considerable number among thesis topics (5).

When it comes to specialization theses, one of the most talked about topics is the publication status of these studies. It is known that the rate of thesis studies published as articles is quite low. However, it cannot be said that the studies on this subject are sufficient. It is possible to endear science to specialty students by working on an original thesis topic and then seeing that work become a publication. Specialization students whose thesis articles are published start their academic life one step ahead (6,7).

Issues such as the publication of specialization theses as articles, how long they are published after specialization, and the index of the journal in which they are published are the criteria that partially reflect the quality of the thesis work (7). In this study, we aimed to investigate the general characteristics of thesis studies on health literacy given to family medicine residents and their publication status.

METHODS

The research was carried out in August 2022. The data of the research were obtained from the Turkish Council of Higher Education (CoHE) National Thesis Center. All theses on 'Health Literacy' were scanned by family medicine specialty students in Turkey without selecting a date. The keywords 'health literacy' in Turkish were used during the screening and the words 'health literacy' were used in a second scan. Among the identified theses, family medicine theses are listed. The authors and supervisors of the family medicine theses listed are noted. It was recorded in which year the thesis belonged and in which institution it was carried out. The subject distributions of the identified theses were examined. Main topics: general internal medicine, general surgery, obesity, diabetes mellitus, obstetrics and gynecology, pediatrics, palliative care, vaccination and other.

The publication status of the theses was searched in the Google Scholar database by using the Turkish title of the thesis, the English title of the thesis, the name-surname of the author of the thesis and the name-surname of the advisor of the thesis. The authors of the theses whose publication information could not be reached were contacted and it was learned at which publication stage the thesis was.

Health literacy scales used in the theses were evaluated. Not only general health literacy scales but

also specific scales used in these theses were evaluated.

The journal in which the published thesis was published and the index information of the journal were examined. Examined indexes were TR Index (national), SCI and SCI-Exp indexes (international).

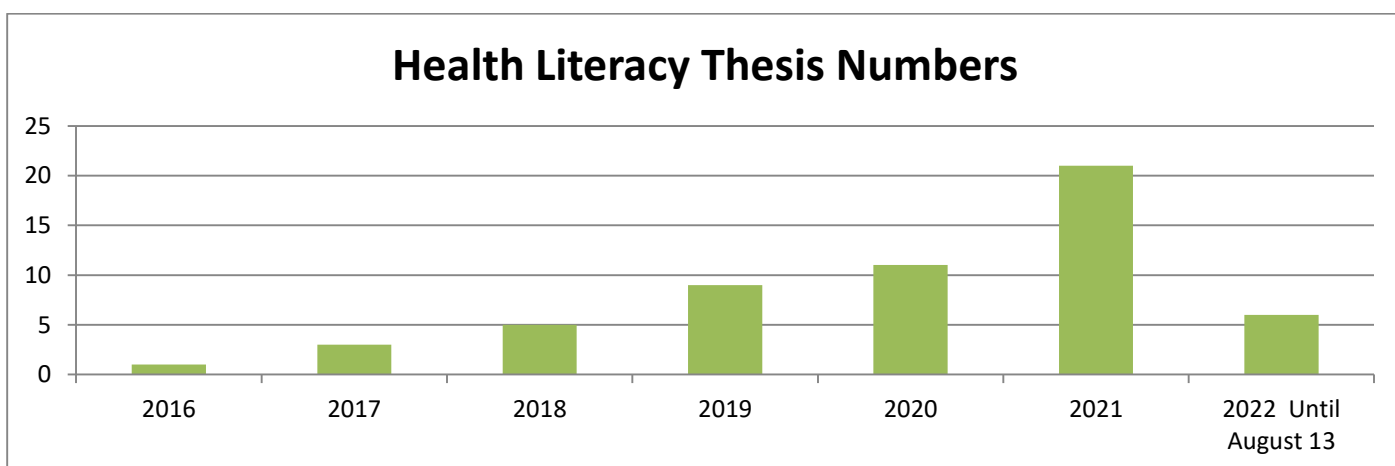
Ethics committee approval was not obtained as no method was used to collect the data of the participants within the scope of the study.

Subject and publication rates of theses were given with frequency and related percentages. Categorical variables were compared by the Chi-square test and Fisher-Freeman-Halton test. The data were analyzed using the SPSS software (IBM Corp. Released 2015. IBM SPSS Statistics for Windows, Version 23.0. Armonk, NY: IBM Corp). A p-value of less than 0.05 was considered statistically significant.

RESULTS

At the CoHE National Thesis Center, 56 of the theses belonging to family medicine residents had the words 'health literacy' or 'health literacy' in their titles. The first of the theses titled health literacy were in 2016 (1%), 3 (5%) in 2017, 5 (9%) in 2018, 9 (16%) in 2019, 11 (20%) in 2020, 21 (37%) in 2021, and in 2022 (up to August 13) 6 theses (11%) were uploaded to the CoHE National Thesis Center (Graph 1).

When the subject distribution of the articles is examined, 15 (26.78%) internal medicine, 4 (7.14%) pediatrics, 4 (7.14%) determination of health literacy levels in various populations, 3 (5.35%) chronic diseases, 3 (5.35%) rational medicine use, 3 (5,35%) with Covid-19 disease and vaccine, 2 (3.57%) with cigarette and tobacco use, 2 (3.57%) with traditional and complementary medicine, 2 (3.57%) with occupational medicine, 2 (3.57%) were related to surgical diseases, 2 (3.57%) were related to gynecology and obstetrics, 2 (3.57%) were related to health and cancer screenings, and the remaining 12 (21.42%) were related to other fields.



Graph 1: Distribution of theses titled health literacy published in the CoHE National Thesis Center by years.

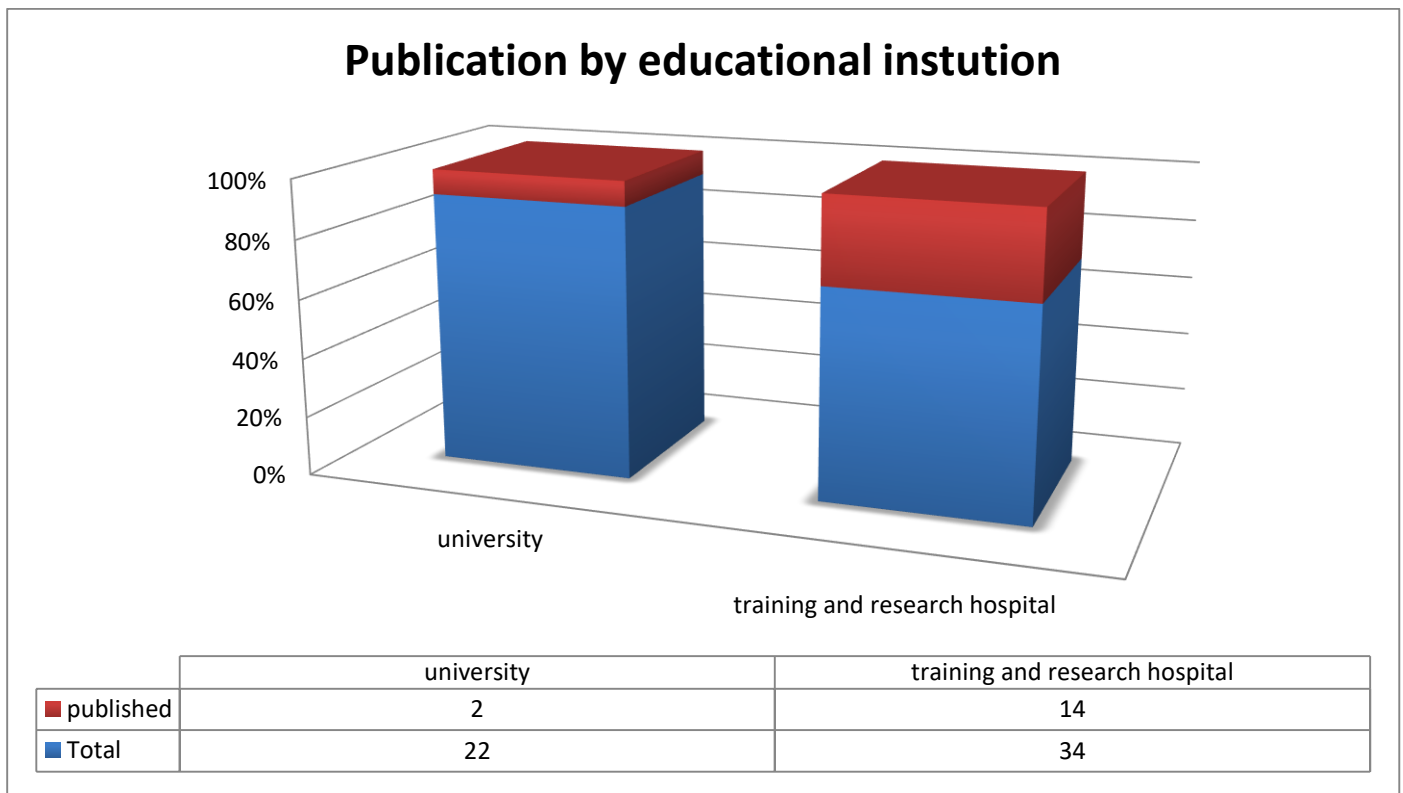
Until 13 August 2022, 16 (28%) of the family medicine specialty theses titled health literacy were published as scientific articles. Only 3 (5%) of these 16 articles were published in an international journal.

Of the theses, 22 (39.28%) were given to family medicine specialty students working at universities and 34 (60.71%) at training and research hospitals. While 2 (9.09%) of the 22 theses given to family medicine

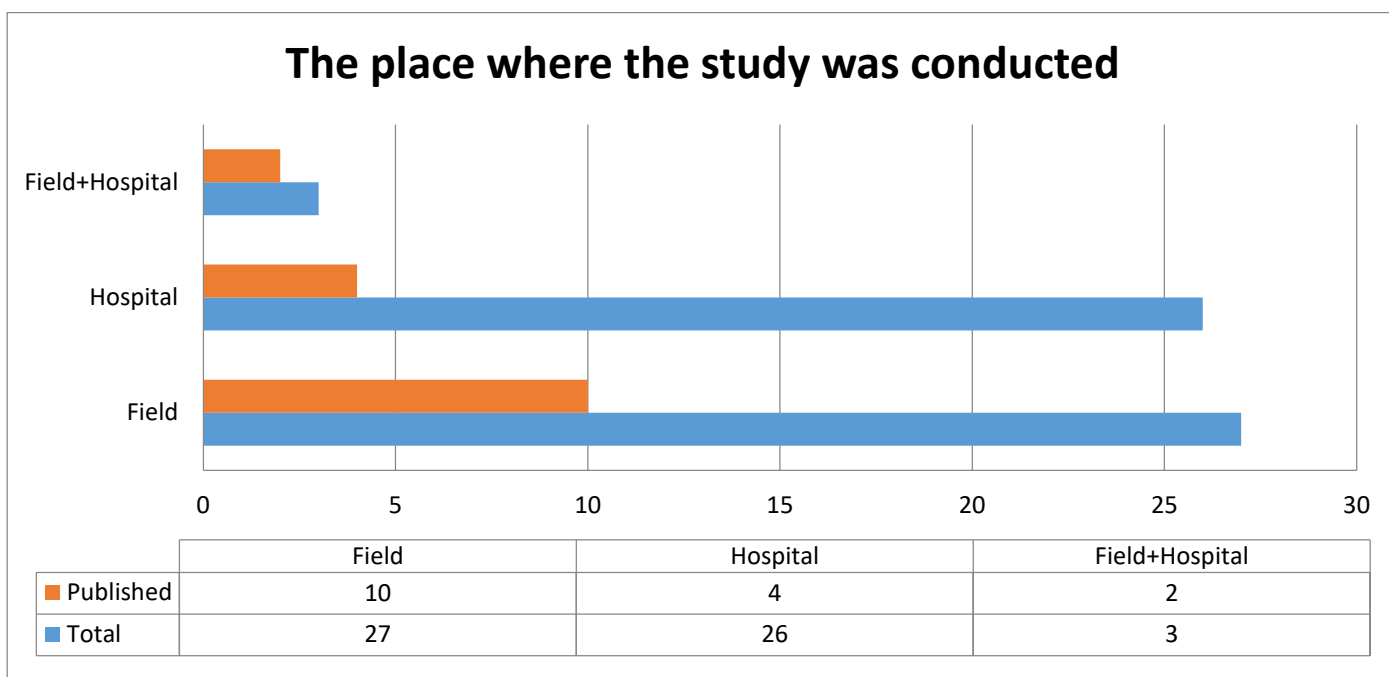
residency students working at the university were published (9,10), 14 (47.05%) of the 34 theses given to family medicine residency students studying in training and research hospitals were published in a journal ($p=0.015$) (Graph 2) (11-24).

Twenty-seven (48.21%) of the theses were done in the field, 26 (46.42%) were done in the hospital, and 3 (5.35%) were done both in the field and in the hospital. Excluding the latter 3 theses, it was determined that 4 (15.38%) of 26 studies conducted in the hospital and 10 (40.74%) of 27 studies conducted in the field were published ($p=0.059$) (Graph 3).

When the subject distributions of the published theses are examined, four (25%) are internal medicine, three (18.75%) are determining health literacy levels in various populations, one (6.25%) is pediatrics, one (6.25%) is rational drug use, one (6.25%) is occupational medicine, one (6.25%) surgical diseases, one (6.25%) gynecology and obstetrics, one (6.25%) palliative care, one (6.25%) Turkish validity and reliability study of the health literacy scale, one on the effect of swallowing anxiety on gastroscopy duration and sedation type (6.25%), and one (6.25%) was the effect of health literacy level on primary health care use in adult patients.



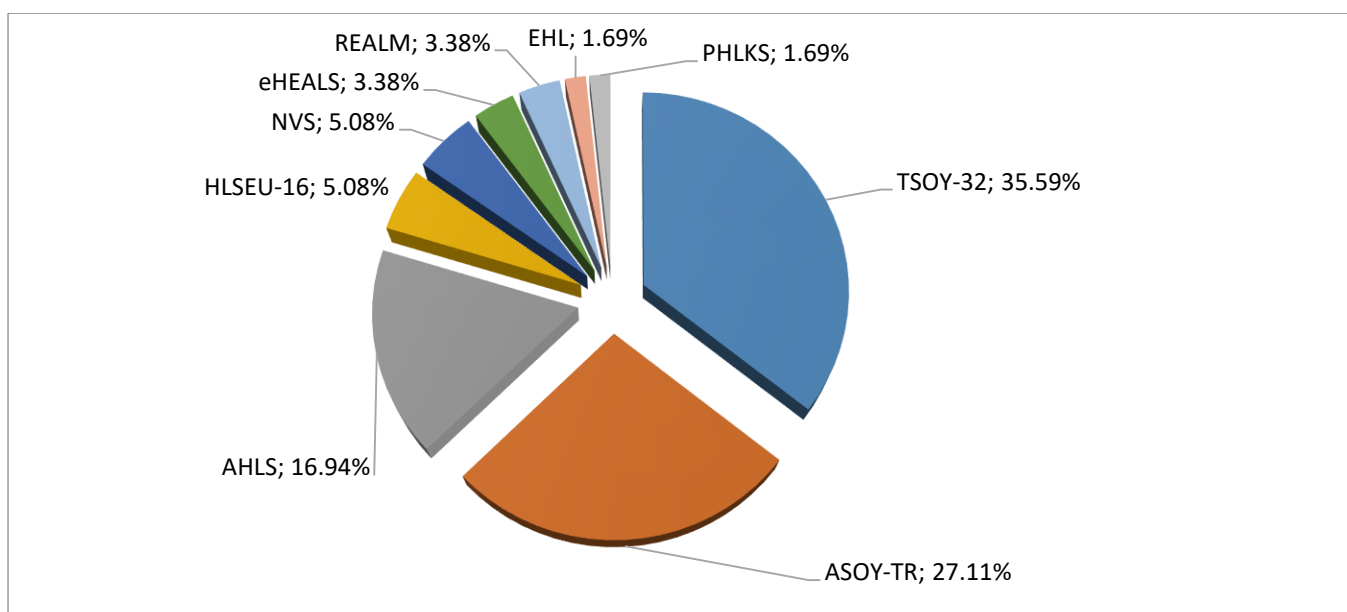
Graph 2: The distribution of theses in the CoHE National Thesis Center according to the educational institution and their publication status in a journal.



Graph 3: The place where the study was conducted and its publication status.

When the health literacy scales used in the studies were examined, TSOY-32: Turkish Health Literacy Scale in 21 studies (35.59%), ASOY-TR: Turkish Version of European Health Literacy Scale in 16 studies (27.11%), AHLS: Adult Health Literacy Scale in 10 studies (16.94%), HLSEU-Q16: European Health Literacy Scale Short Form in 3 studies (5.08%), NVS:

Newest Vital Sign Scale in 3 studies (5.08%), REALM: Rapid Estimate of Adult Literacy in Medicine in 2 studies (3.38%), EHL: Eye Health Literacy Scale in one study (1.69%), and PHLKS: Public Health Literacy Knowledge Scale in one study (1.69%) was used (Graph 4). There were 3 studies in which 2 HL scales were used.



Graph 4: Distribution of health literacy scales used in studies

DISCUSSION

In this study, it was observed that there was an increasing trend in the number of theses on health literacy as a family medicine specialty thesis. The publication status of the theses on health literacy of family medicine residents who received specialization training at a university was lower than that of family medicine residents at a training and research hospital. When the health literacy scales used in the thesis research were examined, it was seen that the three most used scales were TSOY-32, ASO-TR, and AHLS.

Health literacy is a relatively new concept to us. It is thought that health literacy, which can be described as the ability to make decisions about one's own health correctly, is associated with an increase in patients' quality of life and a decrease in health expenditures (26). It is not surprising then, that the interest in the relationship between health literacy and primary care medicine has increased. The gap in this field can be filled by family physicians. It is inevitable that there will be a lot of interest in articles on this subject (26,27).

Family medicine is a broad medical discipline. Family physicians evaluate their patients with a holistic approach. With the education currently being implemented in our country, specialty students receive training in Gynecology and Obstetrics, Pediatrics, Internal Medicine, Psychiatry, Cardiology, Chest Diseases, Dermatology, Emergency Medicine and other elective clinics (Neurology, Physical Medicine and Rehabilitation and General Surgery) (28). In addition, since 2014 they receive field training in primary care for half of their education (18 months). During field training, they meet the patient one-on-one and increase their family medicine experience. Field training takes place in units called training family health centers. Here, residency students provide health services to an average of 3500 people

registered on their own. After the education, family health centers come into service and become attractive units for the specialization thesis research of family medicine assistants. Family medicine residency students carry out their primary care oriented theses in these units and use them effectively in their primary care scientific research (29,30).

Apart from the education of family health centers, another method for family medicine residency students to reach primary care is as contracted family medicine residency students. Contracted family medicine residency students receive part-time residency training and spend an average of 6-9 months of the year in primary care and the remaining 3-6 months in the hospital as in-hospital training. The training of these specialty candidates, who are currently general practitioners, takes a total of 6 years. These physicians, who continue to serve in primary care during their education, may also be primary care oriented in their thesis research. This provides a great advantage for family medicine in field research and community-based research (31).

There are many scales used in the literature to assess health literacy. However, the diversity of scales prevents the formation of a comparable opinion on the subject under discussion. Therefore, not only in our country, but also around the world, researchers have focused on certain scales. It was observed that two of the three most frequently used scales in the theses given to family medicine residents were the ASOY-TR and the TSOY-32 scale. Another frequently used scale was the AHLS scale which was developed by Sezer et al. (25). Validation of Turkish Version of NVS was studied by Çiftçi et al. in 2021 (21). It is a commonly used scale worldwide. New studies using this scale may be possible in the near future. The use of generally preferred scales in research will be valuable for comparable data collection.

In conclusion, an increase in the number of studies on health literacy in primary care is an expected situation. The rate of publication status of the theses on health literacy in family medicine is moderate. It can be supposed that the chance to publish health literacy research theses will increase with the increase in theses conducted in the field. It will be valuable to use a generally preferred scale in the studies for a better comparison of the accumulated data.

Conflicts of Interest

None of the author has any conflict of interest to disclose

REFERENCES

1. WONCA (World Organization of Family Doctors). (2011). The European Definition Of General Practice / Family Medicine. Spain: WHO Europe Office.
2. Mola E, Eriksson T. The European Definition of General Practice / Family Medicine. WONCA Europe 2011 Edition, WHO Europe Office, Barcelona, Spain www.woncaeurope.org/sites/default/files/documents/Definition%203rd%20ed%202011%20with%20revised%20wonca%20tree.pdf, Erişim tarihi: 17.08.2022.
3. Leeuwenhorst, W. P. (1977). Statement by a Working Party of the Second European Conference (1974). Journal of the Royal College of General Practitioners, 27,117.
4. Uğurlu, M. & Üstü, Y. (2018). Türkiye’de Aile Hekimliği Uzmanlık Eğitimi Süreci ve Geliştirilmesi Gereken Noktalar . Ankara Medical Journal , 18 (1) , 123-128 . DOI: 10.17098/amj.409047
5. Saydam MB. Tıpta Uzmanlık Tezi: Tartışılan Sürece Bir Araştırma Kapsamında Bakış. Yükseköğretim ve Bilim Dergisi 2014;4(3):176-81.
6. Çelik NM, Kuçlu T. Türkiye’de Sağlık Okuryazarlığı Üzerine Yazılan Tıpta Uzmanlık Tezlerinin Bibliyometrik Analizi.. SOYD. 2022;3(2):38-95
7. Kaya E, Üçer H, Türkiye’de halk sağlığı alanındaki uzmanlık tezlerinin bilimsel yayına dönüştürülme oranlarının değerlendirilmesi. [Eskişehir türk dünyası uygulama ve araştırma merkezi halk sağlığı dergisi](http://Eskişehir_türk_dünyası_uygulama_ve_arastırma_merkezi_halk_sagligi_dergisi); eskişehir [vol. 5, iss. 3](http://vol.5,iss.3), (dec 2020): 410-417. doi:10.35232/estudamhsd.743925
8. Çakır Çetin, A. , Boran, C. & Erdağ, T. K. (2017). Kulak burun boğaz uzmanlık tezleri yayına dönüşüyor mu? . The Turkish Journal of Ear Nose and Throat , 27 (4) , 185-193 . Retrieved from <https://dergipark.org.tr/en/pub/trent/issue/66955/1046578>
9. Kendir Çopurlar, C. & Kartal, M. (2016). Sağlık Okuryazarlığı Nedir? Nasıl Değerlendirilir? Neden Önemli? . Turkish Journal of Family Medicine and Primary Care , 10 (1) , 0-0 . DOI: 10.5455/tjfm.193796
10. Beyoğlu, M. M., & Dilek, A. V. C. I. (2020). Examination of the relationship between health literacy, concern and anxiety in adults with diabetes mellitus or hypertension and comparison with individuals without chronic disease. Journal of Surgery and Medicine, 4(6), 456-459.
11. Kendir, C. & Kartal, M. (2019). Health literacy levels affect breast cancer knowledge and screening attitudes of women in Turkey: A descriptive study . Turkish Journal of Public Health , 17 (2) , 183-194 . Retrieved from <https://dergipark.org.tr/tr/pub/tjph/issue/48212/420151>
12. Ardic, A., Demirci, H., Ocakoglu, G. & Demirci, N. (2021). Validity and reliability of the Turkish version of the public health literacy knowledge scale. European Health Literacy Journal 1(1), 35-46.
13. Isler, A. O., PAMUK, G., Aksoy, H., & Ongel, K. (2022). Health Literacy Levels of Individuals Between 18-65 Years Old and Its Effect on Rational Drug Use. Eurasian Journal of Family Medicine, 11(2), 127-135.
14. Ozaydin, F., Demirci, H. & Karayurek, Y. (2021). Relationship Between Occupational Accidents of Industrial Workers and Health Literacy and Workplace Safety Climate. European Health Literacy Journal 1(1), 47-57.
15. Akpınar, O. F., Acar, H., & Arica, S. G. (2021). The effect of health literacy level on the use of primary health services among adult patients. Eur Health Liter J, 1, 62-71.
16. Tuna Guner, S. & Demirci, H. (2021). Effect of Health Literacy on Treatment Results of Type-2 Diabetes Mellitus Patients Admitted for Insulin Pen Use Education. European Health Literacy Journal 1(1), 22-32.
17. Besir, Mahsun, E. & Demirci, H. (2021). The effect of health literacy on obstetric decisions of women in reproductive age. European Health Literacy Journal 2(2), 15-25.

18. Ture, D. A., Bhattacharya, S., Demirci, H., & Yildiz, T. (2022). Health Literacy and Health Outcomes in Chronic Obstructive Pulmonary Disease Patients: An Explorative Study. *Frontiers in Public Health*, 10.
19. Metin S, Demirci H, Metin AT. Effect of health literacy of caregivers on survival rates of patients under palliative care. *Scandinavian Journal of Caring Sciences*. 2019;33(3):669–676. doi: 10.1111/scs.12662. - DOI – PubMed
20. Yılmaz Ak, Z. & Demirci, H. (2021). Impact of Health Literacy on Weight Loss in Obese Individuals. *European Health Literacy Journal* 1(1), 14-23.
21. Hayri Bozkurt & Hakan Demirci (2019) Health literacy among older persons in Turkey, *The Aging Male*, 22:4, 272-277, DOI: 10.1080/13685538.2018.1437901
22. Ciftci, F., Demirci, H., Ciftci, H. N., & OCAKOĞLU, G. (2021). Validation of Turkish Version of Newest Vital Sign Scale to Assess Health Literacy. *Bezmialem Science*, 9(2), 219.
23. Ulusoy, E., Yılmaz, T. E., Çiftci, A., Yılmaz, T., Kasım, İ., & Özkara, a. sağlam çocuk takibinde ebeveynlerin rolü ve sağlık okuryazarlığı the role of parents and health literacy in healthy child follow-up.
24. Sakar, F. & Demirci, H. (2021). The Effect of Swallowing Anxiety on Gastroscopy Time and Sedation Type and Its Relationship with Health Literacy 1(3), 108-121.
25. Mut, H., Balci, U. G., & Mergen, H. (2022). An Evaluation of the Health Literacy of Patients Visiting Family Medicine Clinics and The Related Factors. *Eurasian Journal of Family Medicine*, 11(1), 43-52.
26. Mengüllüoğlu ve ark. 2005-2015 Yılları Arasındaki Aile Hekimliği Uzmanlık Tezlerinin Değerlendirilmesi. *Ankara Med J*, Vol. 17, Num. 4, 2017
27. Health literacy program. <http://www.amaassn.org/ama/pub/about-ama/ama-foundation/ourprograms/public-health/health-literacyprogram.page>, Erişim tarihi: 17.08.2022
28. Baker D, Parker RM, Williams MV. Health literacy and the risk of hospital admission. *J Gen Intern Med*. 1998 Dec; 13(12): 791–798.)
29. Tıpta Uzmanlık Kurulu Karar Tutanağı, 21–03/01/2018, <http://dosyamerkez.saglik.gov.tr/Eklenti/14651,karar1087egitimsureleri-2pdf.pdf?0>, Erişim tarihi: 17.08.2022.
30. Tekin O, Üstü Y, Uğurlu M. Aile Hekimliği Uzmanlık Eğitiminde Saha Eğitimi. *Ankara Med J* 2012;12(1):16-21.
31. Eğitim Aile Sağlığı Merkezleri Ödeme ve Sözleşme Yönetmeliği 26 Eylül 2014 tarihli ve 29131 sayılı Resmi Gazete, <http://www.resmigazete.gov.tr/eskiler/2014/09/20140926-3.htm>, Erişim tarihi: 17.08..2022.
32. Sözleşmeli Aile Hekimlerine Verilecek Aile Hekimliği Uzmanlık Eğitimi Usul ve Esasları, <http://www.tuk.saglik.gov.tr/TR,30505/sozlesmeli-aile-hekimlerinin-uzmanlik-egitimleri-hakkinda-karar-no--406.html>, Erişim tarihi: 17.08..2022.