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Gerald and Patricia Turpanjian School of Public Health

Thyroid Cancer survivors' experience in Armenia: a qualitative study

Professional Publication Framework

by

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Acknowledgments

"Do it now,
sometimes later, becomes never"
In loving memory of my patient

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List of abbreviations

AUA - American University of Armenia

ES - Endocrine Surgeon

FNAB - Fine-Needle Aspiration Biopsy

HICs - High-Income Level Countries

IRB -Institutional Review Board

LMICs - Low- And Middle-Income Countries

IoM - Institute of Medicine

PTC - Thyroid Cancer

QoL - Quality of Life

RAI therapy - Radioiodine Therapy, Radioactive Iodine Therapy

TC - Thyroid Cancer

TIRADS - Thyroid Imaging Reporting and Data System

WaPEF - Warwick Patient Experience Framework

Executive summary

Background: Over the last decades, the global incidence of Thyroid cancer (TC) increased drastically, the age-standardized incidence rates reached 5.1 and 16.5 per 100,000 males and females, respectively, in 2020. According to Globocan estimation, the age-standardized incidence rate was 4.5 and 7.5 per 100,000 males and females, respectively, in the Republic of Armenia. The Papillary type of TC accounts to virtually 90% of all TC diagnosis, and it is often incidentally discovered during routine check-ups as this type of TC is typically asymptomatic. The literature has documented an increase in TC overdiagnosis and overtreatment through surgical interventions in recent years, which impacts patient experience.

Patient experience is one of the best measurements for understanding to which extent the health care system is patient-centered and responsive to the patients' needs and preferences.

Aim: This study aimed to explore TC survivors' experience from the patients' and healthcare providers' perspectives in Yerevan, Armenia.

Methods: A qualitative approach was used with in-depth interviews with patients, endocrinologists, and endocrine surgeons recruited by convenience sampling method. Because of the COVID-19 pandemic during the study period, we collected the data via online interviews. The semi-structured interview guides with open-ended questions, prompts, and probes, were developed separately for TC survivors and health care providers. The guides were based on Warwick's framework and contained open-ended thematic questions exploring the domains of the framework.

A mixed approach including deductive and inductive methods was used to create data driven codes and group them into categories and themes. Both code and meaning saturation was reached.

Results: Ten patients and six health care providers participated in this study. Four major categories (continuity of care, communication and information, the patient as an active participant, and responsiveness.) were generated based on the theoretical framework.
The study found the referral flow in the diagnosis and treatment processes was not always well directed towards efficient care. The inadequacy of interdisciplinary collaboration resulted in fragmented care. Patients were unaware of their rights and had a vague understanding of their roles in TC treatment. Lack of trust in health care providers lead to failed patient-provider communication by approaching more than one specialist.

Conclusion: This study was successful in looking into TC survivors' experiences and associated challenges in Armenia from the patients' and healthcare providers' perspectives. The findings illustrated distinct patterns of TC diagnosis and treatment pathways and revealed valuable insights into the barriers. This project could serve as a roadmap for health care providers to better understand and meet patients' needs.

1. Introduction

1.1 Definition and magnitude

Thyroid Cancer (TC) is a slow-growing malignant disorder of the thyroid gland.[1] There are five main types of the neoplasm: Papillary TC, Follicular TC, Hurthle cell cancer, Medullary TC, and Anaplastic TC.[2] Papillary, Follicular and Hurtle TC are differentiated forms, all coming from the same follicular cell in the thyroid gland, which is responsible for iodine metabolism and production of thyroid hormones.[3,4] The most common form among them is Papillary TC, accounting for virtually 90% of all types of TC. Differentiated TC usually grows and spreads to lymph nodes and other organs slowly.[3,4] Medullary TC comes from another type of thyroid cell: C cell or parafollicular cell, which makes calcitonin regulating calcium-phosphor metabolism. Medullary TC could be familial associated with the genetic syndrome such as multiple endocrine neoplasia type 2, and sporadic[3,4] Anaplastic TC is the most aggressive type of TC as it grows and spreads quickly without control. It belongs to the undifferentiated type of TC and makes up less than 1% of all TC.[3,4]

Over the last decades, the incidence and prevalence of TC have drastically increased globally[5,6], the age-standardized incidence rates reached 5.1 and 16.5 per 100,000 males and females, respectively, in 2020.[7,8] According to the American Cancer Society estimates, more than 50,000 new cases are diagnosed in the United States (US) annually.[1,9] Despite the increased tendencies[10], the TC mortality rate remained relatively stable with the age-standardized rate of 0.57 and 0.82 per 100,000 males and females in 2020.[5,11,12] Notably, TC, especially Papillary Thyroid Cancer (PTC), has a good prognosis, with 98% 5-year survival rate and 95% 10-year survival rate respectively.[9]

TC incidence has been reported to be almost twofold higher in developed countries with High-Income Level (HICs), such as Unites States, Canada, Australia, England, Southern European countries, Republic of Korea, as compared to developing or Low- And Middle-

Income Countries (LMICs).[13–16] This phenomenon might be explained by the fact that developed countries have advanced sensitive diagnostic tools ensuring early detection, moreover have better access to health care services.[14,15]

The mortality rate is equally low in both HICs and LMICs indicating possible overdiagnosis and overtreatment in developed countries.[10,16]

1.2. Risk factors for TC

The radiation of neck and head, familial history (mainly first-degree relatives), lack iodine in the diet, female gender, and being in the 45-55 age group are well-known factors that could increase the chance of having TC.[1] Recent studies have shown that being overweight is also associated with the risk of TC.[3] The female to male ratio is 3:1[9,10], yet women tend to have a better prognosis than men.[6] Some studies show a correlation between the level of education and TC morbidity and mortality.[14,17]

According to one study, people with higher educational attainment had increased TC incidence, while people with lower educational attainment had higher mortality.[17]

1.3. Diagnosis and treatment

People with TC may have few or no symptoms at all. The most common one is the lump in the neck or the swollen thyroid glands, which depending on the size and location, can cause difficulty of breathing and swallowing.[2,3,5,12] Pain in the throat, cough, and hoarseness are other nonspecific symptoms.[2,5]

Since PTC is typically asymptomatic, it is often incidentally discovered during routine check-ups.[3,18,19] Physical examination, imaging tests, and analysis of thyroid hormone levels are the first measures to find thyroid-related problems. The first line and non-invasive diagnostic imaging method is the neck ultrasound which shows the size, shape, margins, and echogenicity of any nature of thyroid mass.[1,10,20] To coordinate the procedure and make ultrasound more convenient and practical the Thyroid Imaging Reporting and Data System (TIRADS) tool was created.[21] Both American and European versions of TIRADS are for diagnostic performance as a risk stratification tool for thyroid nodules.

This method is very inexpensive and sensitive; nevertheless, the ultrasound results can vary based on the skill and experience of the expert[1].[21]

Other imaging tests are supportive measures, such as computed tomography, x-ray, radionuclide scanning positron emission tomography, which are not always feasible for all patients due to cost and accessibility for some of them.[22] Next step is biopsy; primarily, Fine-Needle Aspiration Biopsy (FNAB) would be performed for confirmation of the final diagnosis by cytology.[20]

Current treatment approaches are surgery, Radio-Active Iodine therapy with I-131 (RAI therapy, chemotherapy, radiotherapy, and targeted therapy; each of them is followed by lifelong hormone replacement therapy.[2,10] The treatment options are based on the type and stage of the TC, histology, side effects, patients' overall health and age.[2,10] Either total or subtotal thyroidectomy is the treatment of choice for many TC.[2,10] Surgical complications might occur, differing by their level of seriousness.[22,23] Among unfavorable events, injury of the recurrent nerve, vocal cord paralysis, hypothyroidism, hypoparathyroidism, air obstruction, and surgical scar are the leading ones, which could be an extra burden for patients.[9]

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[1] In Armenia, the specialist (radiologist) who performs the ultrasound scan and interprets the images is the same person.

Radioiodine therapy (RAI therapy) is an option of treatment for Follicular and Hurthle TC and for some type of Papillary TC. On the other hand, radiotherapy could be an adjuvant therapy to surgery like chemotherapy and could be prescribed to reduce the risk of the cancer recurrence.

Several studies have shown that the increased incidence of TC over the past decades has been primarily due to the use of more sensitive diagnostic approaches, which results in overdiagnosis.[10,20] Approximately 39% of all Papillary TC cases are papillary microcarcinoma (tumor $\leq$ 1 cm).[23] Patients with microcarcinoma can be classified as low-risk if aggressive features such as extrathyroidal extension, vascular invasion, presence of metastasis, and solid/fixed mass on the neck are absent, the number and size of lymph nodes are also substantial.[5,22–24] In this group of people, surgery or RAI therapy could be considered as overtreatment and lead to avoidable complications and unjustified expenses.[5,22–24]

Several years ago, any type of PTC was an immediate indication for surgery; however, treatment approaches have changed because of down-staging in the new cancer risk stratification system.[1,22] According to the new classification provided by the American Joint Cancer Committee (eight edition)[22] microcarcinoma without aggressive features is not considered a life-threatening condition requiring immediate intervention.[22]

Most recent guidelines in the management of TC by American and European thyroid associations (starting from 2015 and 2017) advocate for the use of a personalized decision-making approach to treat differentiated forms of TC (Papillary, Follicular and Hurtle TC) with the size of 1-4 cm without risk factors based on the tumor parameters, risk of recurrence, patients characteristics and clinicians'skills.[25–28] For tumors less than 1 cm international guidelines (American, European, British) are nowadays in agreement and recommend less aggressive treatment taking into consideration possible overtreatment for more than 90% of patients, complications rates related to the surgery and radiation.[25–27,29] In 2015, the American Thyroid Association suggested a less aggressive approach for low-risk TC such as small subcentimeter asymptomatic PTC (microcarcinoma). Active surveillance, delayed and/or subtotal thyroidectomy or percutaneous ethanol injection are all options for conservative intervention.[1,9,30] The active surveillance approach implies close monitoring and regular screening of those patients who are classified into the low-risk group to assess the disease progression.[19]

A study conducted in Japan, which concentrated on the unfavorable events in the management of low-risk PTC, observed no significant difference between active surveillance and immediate surgery in terms of prognosis.[23] During ten years of follow-up, the cancer outcomes among patients undergoing surgery and those under the observation were similar. Furthermore, the overall incidence of temporary and moderate complications was higher among patients treated immediately.[23]

The intensity and the length of follow-up become an issue for those under active surveillance, as reported by Davies et al. in 2019 in a study evaluating the burden of cancer survivorship in Japan.[12] Some patients report uncertainty and worries about cancer progression when their tumor is untreated.[23,31] Also, regular check-ups, imaging and blood tests, and consultations can result in additional costs for patients.[26,29,32]

1.4. Patient experience

In the last few decades, there has been a surge of heightened interest in evaluating patient satisfaction and quality of life.[12,33–39] Patient experience is a novel public health concept and one of the best measurements for the evaluation of the quality of medical care and health services.[40] It is an appraisal of patients' perceptions and expectations of their received care and is closely associated with the patients' satisfaction.[40]

Patient experience encompasses the range of interactions with the healthcare system characterizing patients' health-seeking behavior, good communication with health care providers, delivered care, access to information, and timely appointments. The quality of experience can have a considerable impact on the patient's overall adherence to treatment and recovery course.[33,39,41,42]

Patients' well-being and health are influenced by their interactions with the healthcare system. The way people are treated and the environment in which they are treated are important. The latter aspects were defined as "responsiveness" by World Health Organization.[40,43] The following main ideas are integrated into the concept and illustrate all the events occurring with the patient: proper communication with healthcare providers; waiting time to see the caretaker for the consultation, patients' autonomy; confidentiality; supportive and kind attitude; respect; and in particular, patients' participation in decision-making processes and information provision.[44]

A patient expects to be heard and acknowledged as a unique individual with beliefs and values. The patient-centeredness approach has a significant impact on the patient experience.[33,39]

A cancer survivor is a patient who has been diagnosed with cancer and is alive regardless of whether he/she is in treatment.[36] The treatment process after getting diagnosed with cancer poses a significant emotional, psychological, and financial burden for patients.[31] The cancer survivor's care requires a professional approach with psycho-emotional support.

Quality of Life (QoL) after TC is changed.[38,45–47] One of the important reasons for decreased QoL is lifelong hormone replacement therapy[47], especially for those patients who have undergone either total or subtotal thyroidectomy with or without RAI therapy.[38,45] In the scope of cancer treatment, doctors may need to prescribe higher doses to keep tumors from progressing. Additionally, the literature indicates that the daily process of taking medication has a significant impact on their quality of life.[47] Also, anxiety, which negatively affects QoL, is often present among newly diagnosed patients and those under follow-up caused by fear of cancer progression and recurrence of cancer after treatment.[45] It has been shown that the level of anxiety is highly correlated with treatment intensity.[45] There is some evidence that routine check-ups for monitoring survivors can contribute to the level of anxiety.[45,47] As mentioned in the literature, sometimes physicians label PTC a ‘good type’ of cancer to help patients to cope with worries.[38,47] On the other hand, it could be accepted by patients as an underestimation of the seriousness of the disorder by treating doctors.[47]

Having treatment-related complications or comorbidities has been shown to be associated with lower satisfaction of the received care among TC patients.[47]

The analysis of cancer patients’ experiences is important for understanding the structure and the process of care and assessing the extent to which provided health care is responsive to patients needs and preferences.[40]

1.5. Theoretical framework

The literature is rich with frameworks assessing patient-reported experience measures. Many of them are based on the Donabedian’s classical structure-process-outcome framework, which are further developed and adapted to suit the given situation.[35,42,48]

The present study used Warwick Patient Experience Framework (WaPEF). Given that this was the first study to explore TC care in Armenia, I wanted to cover all aspects of care. Although there are more specific and suitable frameworks for cancer care, I chose this one because its broad and general domains align with my objectives. The framework was developed based on the framework for patients experience of the Institute of Medicine (IoM).[49] IoM includes almost all the main themes aiming to capture the key dimensions of the patient experience. The essential difference between IoM and WaPEF is that WaPEF considers patients as potentially active participants and managers of their health care experiences whose individuality should be recognized throughout the process of care.[49]

The framework describes seven key domains that determine patient experience: patient as an active participant, the responsiveness of services, an individualized approach, lived experience, continuity of care and relationships, communication, information and support. (*Appendix 1*)

The domains as mentioned above complement each other and it should be highlighted that there are no clear boundaries to separate concepts from one another. The domains that will be used to understand the process of the diagnosis and care in the present study are communication, information, patient as an active participant, and continuity of care and support. *Communication* will refer to the process of interaction with doctors throughout the diagnosis and treatment, revealing any challenges or barriers experienced by patients.[49] Being respectful of patients' needs and preferences are essential during the communication with medical staff.[49] The domain of *information* will dive into the adequacy of provided information related to the disease, diagnosis, treatment options, including benefits and risks, side effects and following surveillance.[49] *The patient as an active participant* has an important role to play in the decision-making process about care and treatment. A patient is free to choose the health care team or center in charge of his/her health. Furthermore, a patient should be empowered by clinicians to ask questions and collaborate with them sufficiently.[49] The domain of the *continuity of care* will illustrate the process of follow-up after diagnosis, further communication and care plan, reliable relationships with the health care providers.[49] *Responsiveness* of health care providers to the patients' needs, preferences and values considering individuals' expectations of service, as one of the indicators of successful care, was explored in the present study.[49]

1.6. The thyroid cancer landscape in Armenia

According to Worldometer, Armenia's population in 2020 was 2,963,243 people.[50] Armenia does not have specific official statistics on the morbidity and mortality associated with any type of TC. Globocan estimates that the age-standardized incidence rate was 4.5 and 7.5 per 100,000 males and females in the Republic of Armenia. Concordant to the literature, the mortality rate was relatively low, with the age-standardized rate of 1.3 and 1.4 per 100.000 males and females.[8]

Ideally, when a patient is diagnosed with TC, the condition should be managed by a multidisciplinary team.[51] The endocrinologist, surgeon, and oncologist are the key specialists of the team and are to work collaboratively.[51] At present, the majority of patients with TC in Armenia are diagnosed by endocrinologists or other physicians incidentally and subsequently referred to surgeons and/or oncologists to complete the treatment. The follow-up care is carried out by a single specialist of the multidisciplinary team. Although the multidisciplinary approach is preferable and accurate, the care will be fragmented if there is no good communication among physicians.[4,12]

Generally, patients may face many barriers on the way of their health care.[52] TC diagnosis and treatment costs often placed a substantial financial burden on patients. To mitigate that hardship and facilitate timely treatment, the Armenian Government revised the law N318 introduced in 2019.[53] Since June 2019, the Government has fully or partially covered the cost for surgery or radioiodine and chemotherapy for any type of cancer/neoplasm However, geographical distance and transportation costs are also well-known barriers.[26,29,32] Patients from various regions must travel to Yerevan to receive TC care at one of the multidisciplinary and well-equipped medical centers. The renowned centers are “Nairi” MC, “Erebouni” MC, “Astghik” MC, “Mikaelyan” MC, and “Artmed” Hospital.

Patients were required to travel to neighboring countries such as Russia or Georgia to receive their RAI therapy following the surgical treatment.[54]

Until 2019, there were no centers in Armenia that could provide radioiodine therapy for TC patients. The opening of the first Nuclear Medical Center in Armenia resolved this issue.

2. Study aim

The aim of this study was to explore the TC survivors' experience related to the diagnosis and treatment process from the patients' and healthcare providers' perspectives in Yerevan, Armenia.

A qualitative exploration of the lived experiences of patients could provide unique insights into the process of TC diagnosis and care in Armenia and help the policymakers better to understand existing issues and underlying gaps in the field. It could contribute to the improvement of the quality of services and the reduction of financial burden through avoiding unnecessary interventions.[12,39,40] On the other hand, health care providers can also benefit from the study in terms of understanding the needs of their patients better. Study findings might underline any existing discordance in the perspectives of patients and providers and might be useful and scalable to other types of cancer as well.

2.1. Research Questions

The following questions will be answered by the study:

- What are the experiences of TC survivors in Armenia?
- What are the current approaches to diagnosis and treatment of TC patients in Armenia?
- What is the level of patients' involvement in the diagnosis and treatment process?

- What are the main barriers that patients face during their diagnosis and treatment process (e.g. difficulty contacting a physician and getting an appointment, unavailable services, transportation problems, cost issues, and lack of information about the disease and treatment options).

3. Methods

3.1. Study design

A qualitative approach with in-depth interviews with patients, endocrinologists, and endocrine surgeons chosen for this study allowed delving deeply into the individual experience of study participants. The study followed the principles of the phenomenological approach helping to investigate patients' experiences in breadth and depth.[41,55]

3.2. Study population

The study population included TC survivors, endocrinologists and endocrine surgeons residing in Yerevan, Armenia.

The inclusion criteria for health care providers were the following: having a medical degree, being currently practicing in Armenia, dealing with TC patients, and having at least five years of experience.

Adult males and females 18 years of age and older who had TC, were aware of their diagnosis and have been operated on for TC at one of Yerevan hospitals during the past five years were eligible for the study

3.3. Recruitment and data collection

Because of the COVID-19 Pandemic during the study period, the data were collected remotely.[56]

The student investigator recruited study subjects applying a purposive convenience sampling[57] method and snowballing technique. After getting patients' preliminary agreement for participating in the study, the investigator contacted them and made appointments for in-depth interviews via video call.[58,59] Also, personal contacts were used to approach endocrinologists and endocrine surgeons working in medical centers and polyclinics in Yerevan.

After explaining the purpose of the study and obtaining oral consent from the participants, the student investigator proceeded with the video call interviews via the social media apps Viber, Messenger, and WhatsApp. The interviews were recorded.

Additional interviews were conducted following data saturation among participants to obtain more information on post-operative follow-up and ensure insider objectivity. The student investigator took field notes during the interviews and kept audit trails to ensure the confirmability and rigor of the study findings. The diary summarized all the activities and impressions of the student investigator and used during the coding process to remain unbiased and reflective.

3.4. Interview guide

Data collection was done based on semi-structured interview guides for patients, (*Appendix 2 and 4*) endocrinologists, and endocrine surgeons translated into the Armenian language by the student investigator.[41] (*Appendix 3 and 5)*

The semi-structured interview guides with open-ended questions,[21] prompts and probes, were developed separately for TC survivors and health care providers.[41] The interview guides were developed based on the existing literature using Warwick's framework as the main guiding tool.[49] The guides consisted of some demographic[47] questions in addition to 13 open-ended thematic questions exploring the domains of communication, information, support, patient's involvement as an active participant, and continuity of care. The guides for patients and clinicians cover the same topics of patients' experience of TC diagnosis and subsequent treatment.

3.5. Data management/analysis

During videocalls, the audio recording was started only after obtaining participants' permission. The data were transcribed verbatim and translated to English simultaneously by the student investigator. Only one participant (patient) refused to participate in a video call because of the fear of being recognized, but agreed to the audio recording.

Data analysis was conducted after completing all interviews. Content analysis was applied to explore the TC survivors' experience.[35,42,48,49,60,61] A mixed approach including deductive and inductive methods was used to create data-driven codes and group into categories and themes. No computer software was used for the analysis.

The student investigator generated preliminary codes using process, in-vivo value, and descriptive coding methods and student's investigator's field notes and audit trails. The final complete codebook consisted of 76 codes. Both code and meaning saturation was reached.[33,41,45,62] Code saturation was achieved by having the majority of created codes in the codebook, while the meaning saturation was reached by understanding all possible variations under each code and theme.

Five categories were used based on the theoretical framework to describe TC patients' experience in breadth and depth in Armenia. The categories included 1. Information and communication, 2. Patient as an active participant, 3. Continuity of care and 4. Responsiveness and support, 5. Health belief. The important aspects of patients' experience relevant to the major categories were included as separate themes under each category. (*Appendix 13)*

The data obtained from TC survivors were triangulated with the information provided by endocrinologists and endocrine surgeons working in medical centers and polyclinics to have a complete picture of the patients’ experience and improve the credibility of the study.

Demographic data were analyzed using “Microsoft Excel” software.

Audit trails were maintained to improve transparency.

4. Ethical considerations

The Institutional Review Board of the American University of Armenia (AUA), (protocol #: AUA-2020-010) approved the study protocol before fielding. Oral consent from all study participants was obtained before each video-call interview. Personal identifiers such as name and phone number were accessible to the student investigator only and destroyed after the completion of the study. No names or other identifiers were published in the study report, and all reported quotes were deidentified.

The electronic data were backed up and kept in two different password-protected computers accessible exclusively to the student investigator. The transcribed data were deleted from the portable devices after transferring them to the password-protected computers and were not stored in any cloud-based servers.

All participants were assured of their rights, confidentiality and anonymity and were provided with a telephone number for contacting the research team for further inquiries regarding the study. *(Appendix 6-9)*

5. Results

5.1. Socio-demographic characteristics of the study participants

Sixteen people participated in the study: ten patients and six healthcare providers. Overall, 23 individuals were approached (16 patients and 7 providers) of whom four refused stating that their spouse did not want them to participate, and three (all female) were not eligible. One health care provider refused to participate saying that he/she would not feel comfortable talking about the investigated issue. The average duration of the interviews was 44.5 minutes ranging from 29 to 80. Out of six healthcare providers, three were endocrinologists and three endocrine surgeons.

Most of the families' spending varied between AMD 100.000 and 300.000 monthly.

5.2. Continuity of care: TC care pathway from diagnosis to long-term follow-up

Diagnosis

Diagnosis of TC takes on average from one week to one month in the Republic of Armenia, sometimes it can take several months, depending on the patient's health seeking behavior.

"The process can last from two weeks up to four weeks, that is … to find a good ultrasound examination, biopsy, surgery, waiting time and so on. I think up to a month, but it is possible to organize everything faster if there is an urgency"

Endocrinologist #3

"If the patient is managed appropriately, it is possible to diagnose the problem and perform the hormonal examination and cytological test within a day. Taking queues into account, it is a matter of 2-3 days, and if there are no other health issues, the surgery could be performed; after that, the patient would only stay in a hospital for a day"

Endocrine surgeon #1

Usually most patients learned of their diagnosis as an incidental finding during routine exams. Some of them had nonspecific complaints and were referred to endocrinologists by other specialists.

"It was a routine check-up at my workplace [as part of the annual check-up at workplace covered by their social package or health insurance]. The ultrasound radiologist told me

that my thyroid has grown [size] and I need an endocrine surgeon's[2] *consultation. I did not have any symptoms"*

Patient #1

"It was identified accidentally, I did not have any symptoms. They [ultrasound radiologist] told me that I had a neoplasm, a node of about 1.02 cm, which is possibly cancerous"

Patient #2

"I have had severe headache for about a month, but did not take them seriously. I had high blood pressure and noise in my ears. My ENT[3] *doctor examined me and referred to endocrine surgeon to consult about my thyroid problems"*

Patient #3

"Everything started from the heart, I had complaints…so, I had an ultrasound and then the doctor [ultrasound radiologist] advised to do biopsy"

Patient #4

Various specialists referred patients to imaging (ultrasound) tests rather than to an endocrinologist. Almost all the patients mentioned similar patterns of referrals. For half of the cases the specialists were gynaecologists who provided care to women of reproductive ages. Mostly ultrasound radiologist referred to Endocrine Surgeon (ES) or even determined the need for fine-needle biopsy in the majority of cases during the ultrasound scan. The findings revealed that ultrasound radiologists usually referred patients to a specific ES.

"During the second ultrasound scan the doctor [ultrasound radiologist] found out my problem and sent me to surgery very urgently, saying that I need immediate surgery, and gave me the contacts of my surgeon"

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[2] Please note that in their quotes, patients refer to their endocrine surgeons as surgeons.

[3] ENT-ear, nose and throat specialist

Patient #4

"I went to the Center again, took the exams, and did an ultrasound. The ultrasound radiologist told me there is a serious issue and I need to do a biopsy. Then after biopsy she told me that it is not life-threatening, the treatment would be done through surgery and named ES who was renowned famous in the entire republic, she said he is the best"

Patient #6

Although most patients underwent surgery within a week of having a biopsy, the time to surgery varied by the time from first visit to getting a biopsy.

The diagnosis pathway of patients living in the regions (marzes) somehow differed from those living in Yerevan, as they had to come to Yerevan to get better-quality care. Likewise, doctors from regions referred their patients to Yerevan for more comprehensive examination and treatment as the region's opportunities are limited in terms of specialists or equipment.

"The problem is that ultrasound scan is often not reliable … and you have to repeat the examination here in Yerevan"

Endocrinologist #3

"There are numerous issues [with care] in the regions. First and foremost, to find out those patients, they should have an ultrasound specialist at least of intermediate proficiency; second, they should have a competent endocrinologist who will understand the problem, its seriousness and refer to the surgeon; and finally, I have not heard of endocrine surgeons working in regions.... mostly, they are general surgeons who are not specialized in this field...who try to refer those patients to Yerevan"

Endocrine surgeon #3

Upon hearing about suspicious nodule/mass patients reached out to well-known ES. Most of them chose ES based on the opinions of their friends and relatives unless an ultrasound radiologist have already told them who to contact. Two patients reported that they had been referred by their endocrinologist.

A few patients reported late access to thyroid specialists due to insufficient monitoring at their primary health centers. A few health care providers have highlighted the problem of poor-quality treatment at the primary health care center.

“During those two years of lab tests, ultrasound scan and other examinations, my doctor [at polyclinic] prescribed medication for everything and advised not to intervene, to wait, but my condition was getting worse, while I had a serious problem, so I decided to change my polyclinic realizing that my treatment was not correct.”

Patient #4

“Because primary health care providers aren't paying attention to thyroid issues [cancer], they only see the nodule, and that's it. They don't explain anything and don't check to see if anything has changed. All of this should be strictly monitored, but they often overlook it and refuse to prescribe hormone tests, simply stating, "Yeah, you have a nodule there, nothing to worry about." This is particularly true of doctors working in polyclinics.”

Endocrinologist #2

Furthermore, the majority of patients and health care providers have not relied on care provided at the primary health care centers and almost none of the patients mentioned that primary health care had a significant role in their care experience.

Treatment

Overdiagnosis and overtreatment

Several healthcare providers commented on the treatment options available in Armenia for TC patients, stating that patients are more likely to pursue intensive surgical treatment. They prefer total removal of the gland to partial resection and in cases of microcarcinoma patients are mostly unwilling to undergo active surveillance instead of surgery. They elaborated that strategy was practiced by some surgeons to be on the safe side.

"In our country, we tend to actively intervene, we fail to have active follow-up because there are factors affecting that strategy, such as patients' emotional/psychological status and the practice of approaching other specialists for the second opinion. I am sure that this will change with time. My patients don't support conservative/[organ saving surgery]. They tell me "I would feel better if you remove everything", although the benefits of organ saving procedure were clearly explained to them in detail"

Endocrine surgeon #1

Sometimes the situation is made worse by health care providers.

"The challenge of active surveillance is that when you clearly explain [the benefits of active surveillance] …it lasts till the patient meets another endocrine surgeon with a more aggressive treatment approach who tells them that their previous surgeon was wrong"

Endocrine surgeon #2

One patient mentioned that not being operated can cause stress later in life.

"I was personally prone to not keeping this "bomb"[Thyroid cancer] in the body, especially since there were no issues with resecting half of the gland as the other half can function sufficiently, especially when you are young"

Patient #1

There was only one patient who was keen to keep at least some part of the thyroid gland in the hope that it would help to maintain the metabolism.

"...the only thing I asked was to keep the left lobe of my gland...I was not against the second surgery, I promised not to complain about not doing total resection...I was thinking of keeping some part of my gland would help me"

Patient #2

Health care professionals mentioned that it is common practice to operate without biopsy and confirm the diagnosis afterwards, although such cases are becoming rare.

"So far there is a team of surgeons who ignore the stage of biopsy and operate their patients not to lose/miss them. I always inform my patients that there are surgeons who would operate without biopsy and it would be a wrong approach."

Endocrine surgeon #3

The health care providers explained that generally, non-endocrine surgeons deal with TC, and they do not fully understand the nature of TC diagnosis and care, potential risks and are not aware of relevant guidelines.

"Usually we see patients operated on by general surgeons, who are "old school" and refer their patients to oncologist only after surgery (if they ever do)"

Endocrine surgeon #3

"It would be better if only specialized surgeons dealt with thyroid problems. We need more specialized surgeons who ... treat patients following the guidelines"

Endocrinologist #3

While some healthcare providers noted that there was a phenomenon of *overdiagnosis* in Armenia because of more sensitive screening tools, others mentioned that the term *overtreatment* rather than *overdiagnosis* should be used, explaining that all patients with any type of nodes get operated.

"There is a great deal of overdiagnosis which is because of newly developed equipment and examination methods in the world, but it has its positive aspects as well"

Endocrinologist #1

"I wouldn't say they are over-diagnosed, but they are 'over-operated' [overtreated]. In most cases, patients are operated without biopsy just because they have a nodule"

Endocrinologist #3

"For many years everyone who had a nodule was operated on. Could you imagine, it was a catastrophe. We have surgeons following old Soviet practices. The strategy was - if a nodule is found, the operation should be done despite the international experience"

Endocrine surgeon #3

Post-operative follow-up

Almost half of the patients encountered different post-operative complications varying from the mild transit hypocalcemia and hypoparathyroidism to severe ones, including the paralysis of vocal cords resulting in voice problems lasting up to two months.

Most of the patients needed RAI therapy post-operatively, and those who underwent surgery more than two years ago had to go abroad (Moscow or Georgia) to receive their treatment there, despite two healthcare providers claiming that there was already an operating center in Armenia at that time.

Patients who received their iodine therapy at the newly opened center in Armenia considered it more convenient and affordable than travelling abroad for receiving care as they were not isolated from family and friends and did not bear additional travel expenses.

One health professional reported that despite the presence of the newly opened center, diagnostic evaluation with the use of iodine is still not available in Armenia. The expert added that the drug is not approved in Armenia and is not used at all. The drug is intended for the pre-radiation therapy stage of treatment in order to speed up their preparation process without adversely affecting the quality of life.

According to the study participants, the treatment continuation and further control in Armenia are mainly carried out by endocrine surgeons, not endocrinologists, in the postoperative period. That was the case with six out of nine patients. Some patients decided to remain under their surgeons' supervision, even though they had been referred to the endocrinologist by the latter.

Notably, endocrine surgeons stated that it is an extra burden to follow-up patients post-operatively considering the time and necessary knowledge. It would be more effective and more ethical if each specialist did his/her job.

"The management of TC patients post operatively has it nuances but in our country many surgeons follow-up their patients after surgery, which should be done by endocrinologist and oncologist together. It is a burden for the surgeon, my colleagues abroad are relieved from that burden"

Endocrine surgeon #1

Improper guidance on follow-up care

In some cases, treatment continuation can be inaccurate or interrupted because of improper guidance or poor adherence.

"After surgery I was told to take RAI therapy. Frankly speaking, I did not get my iodine therapy, I do not know whether I was wrong or right, but I did not do that. My problems were not resolved, I have the same symptoms, I do not know, maybe if I got my RAI therapy, I would feel better, I don't know."

Patient #5

"Many problems usually happen with hormone replacement therapy when patients get prescribed high doses of Levothyroxine by surgeons. It is a very common issue here"

Endocrinologist #2

Most patients reported that they were not properly informed about their follow-up treatment plan. One patient said he/she was not told about potential complications of hypocalcemia and had local seizures several times a month without knowing that it is curable

There were cases when the decision to take lab tests was left up to patients, with no precise accordance with international guidelines, including the proper schedule.

"The surgeon told me to have blood tests done every 3 months. If I have symptoms I can do it more often, in case I feel better I can have the tests done less often"

Patient #2

A similar situation was reported by another patient whose surgeon did not clearly explain the need for RAI therapy and only recommended it to her spouse as an advice.

According to health care providers, chemotherapy is not as common treatment modalities as surgery and RAI in Armenia; besides, they stated that thyroid cases requiring chemotherapy are rare.

COVID related barriers in TC care

Because of COVID-19 pandemic lockdowns, RAI therapy was discontinued in Yerevan as iodine substance could not be imported into Armenia; additionally, patients could not leave the country to get their radiation outside Armenia. Also, patients mostly skipped their scheduled follow-up visits and required lab tests out of fear of being infected by COVID-19. Subsequently clinicians have to prescribe high doses of Levothyroxine to maintain the suppressive therapy of cancer treatment until that issue would be resolved which leads to related complications.

"Because of COVID-19 we have to wait for the end of the regimen, opening of international borders but before that we prescribe maximum dose of the suppressive therapy"

Endocrine surgeon #1

Cost of treatment and transportation as barriers to care

Some patients stated that money could be a barrier for many patients to get diagnosis and treatment on time or receive it at all.

"Lots of tests each time and many drugs, which are quite expensive… I know so many people for whom it is a very difficult issue …not everyone can do all of the above mentioned every time"

Patient #4

"...there are people who have the problem [thyroid cancer] and they do not approach a doctor just because of the financial issues…I knew a woman who did not do regular analysis after surgery"

Patient #9

The opinions of healthcare providers highly correlated with what the patients claimed.

"Diagnosis and treatment may not be available for patients … there are patients for whom those examinations become a big financial burden, i.e. a thyroid ultrasound, biopsy, hormone tests, consultation payment with an endocrinologist, surgeon, at the end it costs a lot of money"

Endocrinologist #3

"About one fifth of the patients, depending on their financial status either delay the surgery or do it a year later, the number of such patients is not big but they exist, fortunately the number is decreasing"

Endocrine surgeon #3

At the same time, patients were skeptical of free services, particularly polyclinics, and emphasized the importance of paying for high-quality care out of pocket.

"...if you want to do a good ultrasound, you should pay...they might not "treat you well" with your insurance [the radiologist might treat you carelessly], that is why I used paid services twice a year in parallel with free ones to be sure that everything was fine..."

Patient #7

Only two health care providers were aware of the governmental program supporting cancer patients financially. Only one patient was aware of it and stressed that the surgeon helped to get it. Some other patients reported that their expenses were covered by insurance or social package, the rest paid for their surgery around 600.000-700.000AMD.

"When I was worried about my expenses, my endocrine surgeon said there was no need to worry because now the government cares, and it is more supportive. Everything is free of charge based on the diagnosis, I just need to fill in a few documents"

Patient #3

"My social package covered the surgery, but I had to pay for the treatment in Georgia and all of the lab tests"

Patient #8

"The Ministry of Health of Republic of Armenia has solved financial issue recently for us. Thyroid cancers were included in the program and the treatment is free of charge. The only problem is RAI therapy for which they have to pay"

Endocrine surgeon #1

The drawback of the governmental program is that joining the program is not mandatory for health centers.

Transportation and accommodation costs were also mentioned by the patients residing in rural areas who had to go to Yerevan for their health care.

"There are financial difficulties when you have to come from the region to Yerevan, you have to stay somewhere to undergo all the procedures."

Patient #2

Alignment with international standards of care

According to health care providers, the absence of locally adapted guidelines was a serious drawback. Lack of standardized and systematic approach to treatment made patient-doctor communication complicated and resulted in different practices among providers.

"There is a serious problem. You do something right based on your judgment, protocols etc. and suddenly another specialist appears who shares his/her opinion with your patient and complicates your work. I had a case when my patient got into panic as he/she was asked by another specialist [an ultrasound radiologist], why his/her thyroid gland wasn't fully removed.

Endocrine surgeon #1

Fragmented care

Almost all healthcare providers emphasized that there was no professional collaboration among specialists from different disciplines. There are no multidisciplinary teams, and no tumor boards exist in Armenia. The lack of cooperation between and within medical centers often resulted in fragmented care.

"I face an interesting reality where the specialists do not collaborate - I mean each of them is locked in his/her field and they neither want to give out any information nor want to share their experience"

Endocrine surgeon #1

According to health care providers, coordinating the care of TC patients in one hospital from diagnosis to surgery would be advantageous for patients from the time management and financial perspectives.

Poor reliability of medical tests often made health care providers repeat them, which in turn created additional financial, time and moral burden for patients. As a result, health care professionals preferred to collaborate only with their trusted experts and became more selective in terms of which labs to send their clients to. On the other hand, according to the patients, it could by dictated by commercial interests too.

"I went to my doctor [nuclear physician] in two months to take lab tests, but she sent me to the specific center. I partly understand why she sent me there [smiles]"

Patient #6

"I don't know, you go to one doctor, he tells you something, then refers you to another, who may say something completely different, and it's all based on money."

Patient #5

"…there is a problem with laboratories, that is, there are few reliable laboratories that I trust, I rely on those results…not all results can be fully trusted…"

Endocrinologist #1

"Because of poor quality of ultrasound [no TIRADS classification], you have to ask your patients to repeat the examination and … you send the patient to your trusted radiologist to get a quality diagnosis"

Endocrinologist #3

5.3 Information and communication

The perceptions of the adequacy and style of provider communication about diagnosis, treatment options, discussion of risks and side effects differed across the study participants. Effective communication helped the TC patients to make sense of their condition, developed confidence for self-management, and increased adherence to treatment.

Disclosing a cancer diagnosis

Overall, the interviews revealed no uniform approach to informing patients about their diagnosis among healthcare providers. Almost all the patients remembered in detail how they were informed about TC. Some patients underlined that doctor's approach helped them to overcome that moment, while others read the report with their diagnosis and became confused as a result. One patient reported being told on the phone that she has cancer.

"...when I called [cytologist], she said there is a suspicion of medullary carcinoma and suggested to take the test for the level of calcitonin.

I was very worried. The doctor promised to help me with that and inform about the biopsy results by phone as soon as they are ready.

I was thinking: what should I do, how should I tell my parents? what if I have cancer"

Patient #2

Another scenario was when the patient read his/her diagnosis before the doctor's consultation and started digging the internet herself.

"I went to him with my biopsy results, but before that I opened the envelope and saw the "papillary carcinoma", I found that it is a bad thing [carcinoma], so I went to him crying. The doctor looked into the reports and did not even pay attention to me… and then told me not to be afraid of it, as he operates six patients like me daily..."

Patient #10

The use of medical terminology as a barrier to communication

Many respondents mentioned that clinical consultations with their providers were mostly overloaded with medical terminology, which made the communication unclear and ineffective.

“I had an ultrasound, and there was written the word carcinoma, but I didn't know it was a neoplasm, I did not know what it was. And the doctor did not tell me that it was a tumor, did not explain …in lay language

Patient #4

I know that a detailed explanation for the client is not common in our [in Armenia] medicine. There is no such approach… sometimes there is, but mostly terminology is used. And now I do not ask anyone, I figure out everything myself”

Patient #4

Consultation time and content

Many patients complained that consultations were overly short, and that it was not possible to discuss all issues that concerned them with their providers.

“To be honest, it was a bit hard to discuss it with him. Everything was brief. I was worried about that… I could ask a question and get a very sharp/brief response, after which I did not want to ask another question…it is not like me...I had many questions…I was not able to go into many details”

Patient #6

Most patients reported lack of proper explanation during consultations; no details regarding cancer or treatment.

“You know, the only problem with my doctor was that he did not properly explain anything I wanted to understand. After surgery, I felt horrible, I went to the doctor, but no one explained why I had twitching muscles on my face. They were just like “oh, yeah, let's go and take some calcium gluconate”

Patient #10

Many of the patients were unaware of the procedures they were about to undergo. For instance, they were unfamiliar with what to expect during fine-needle aspiration biopsy, so the procedure was mostly refused. At times, a lack of information caused patients to switch their doctors.

"Well, my first surgeon told me that I needed surgery and that is it, and I do not remember us discussing any adverse effects. But my second surgeon explained everything to me starting from the type of cancer to the prevalence and surgical options."

Patient #3

"He said biopsy is needed, he wrote it on the piece of paper and passed it to us. He neither explained... nor… nothing

... I would only like him to be warmer in his communication, more understandable to me... he did not explain anything to me…thank God... he saved my life entirely"

Patient #10

In accordance with patients' reports, health care providers stated that it was possible to overcome patients' reluctance to take up certain procedures by providing patients with necessary time and detailed information.

"…I am convinced that in our clinical practice we need to spend a lot of time discussing with the patient, talking to him. It is very important, as when you try to explain in detail, illustrate, bring several examples, the patient understands everything and relaxes."

Endocrine surgeon #1

Other patients, on the other hand, reported that they were highly satisfied and were aware of everything related to their condition.

"My surgeon is like a psychologist. Maybe he knows how to speak with people. When I go to him he gives me power... my doctors guide me on how to behave later on …everything is written in detail"

Patient #8

"The doctor explained everything in advance and even gave me a guide about what should be done prior to going to radioiodine therapy, what products should not be used and what would happen to me during radioiodine therapy"

Patient #9

Seeking information from friends and relatives

Most patients mentioned that in addition to health care providers, they obtained the necessary information about TC care from friends and relatives, especially those friends who were healthcare providers themselves.

"I have friends who are doctors, also among my relatives. I asked them"

Patient #1

"...I learned about RAI therapy from my friends who went through this..."

Patient #7

Many patients searched the internet to enhance their knowledge of the disease.

"I understood everything myself, because I have read lots of medical literature, I have read so much for myself over time that if someone tells me about a diagnosis next time or I read it, I will understand and I will not expect the person in front of me to explain it to me."

Patient #4

"I came home, connected to the internet and searched my test results and saw the problem is serious.

Before the biopsy, I did a lot of research on the internet, looked into everything to understand what can happen to me so that I am ready for that"

Patient #6

Modes of communication with providers

All health care providers confirmed patients' words saying that they keep in touch with their patients through phone calls. It was a well-accepted mode of communication. During COVID-19 pandemic it became even more common.

"I was sending messages to the surgeon, to be accurate, my brother was sending via Viber. And that's how we decided on the dose of the drug. I only went to a personal consultation once after the surgery. In all other cases, we communicated over the phone"

Patient #7

"...By [phone] calls. I called and then visited in person. Each time I called he answered..."

Patient #8

"I was in my region and the doctor was in Yerevan, we have been in touch mainly via video or audio calls. I approached him for any problem that I had, and he replied to me very nicely every time"

Patient #9

5.4 The patient as an active participant

Care-seeking behavior and coping

Assertive behavior towards their health and well-being was common in the study respondents. They were self-motivated and had enough self-confidence to push themselves forward and develop positive coping mechanisms.

"...while doing the [ultrasound scan the radiologist told that I had nodule >1cm and should pay attention to it. So, it was just my initiative... being picky to health... that made me go to the doctor"

Patient #1

"I thought that nothing can happen to me, because I had two children, I had two children, I had a husband, I had a family, and I thought I had to overcome it. Even if I have a small chance, I will fight and overcome all that… And all on my own, I was alone, no one has ever noticed my depression. And since then, I've been considered a hero"

Patient #4

"... there was a huge emotional impact, but I gave them [family] hope… I gave them hope and help to overcome it. And that was due to my good state of mind, my optimism. I appreciate life and I advise my friends to enjoy their day..."

Patient #7

Most patients were active in choosing their healthcare providers and healthcare centers, sometimes even bypassing/skipping the accepted route of care.

"We saw a small nodule by ultrasound scan and immediately approached the endocrine surgeon. It turned out we had some good connections, so he/she helped us to approach the right professional after the ultrasound"

Patient #1

At the same time the interviewed providers thought that lack of awareness among patients decreases their chances to become active participants in the treatment process. They mentioned that patients do not take the presence of thyroid nodules seriously; as a result, they delay cancer diagnosis and treatment and have low compliance.

"Step by step, I inform a patient that he/she has cancer. I need him/her to know the diagnosis to help me make the treatment plan and manage it. Sometimes relatives ask me not to tell the patients their diagnosis, but it will create problems in cooperation.

Nowadays, the information is open and accessible, so not telling patients about their diagnosis will cause trouble. Saying everything will make it easy, and the patient will not hinder us but help."

Endocrine surgeon #1

Patients' role in care-related decision-making

The notion of patients' role in the decision-making process about care and treatment was unclear to healthcare providers. Similarly, patients mostly did not understand their role and to the question of whether their treatment preferences were considered or not, they replied that they must follow what surgeons tell them.

"*To be honest, my approach is the following: this is not an esthetical procedure, I did not do anything [putting my preferences forward]. It was like we found the nodule and I was told what the solution was…I would not say I had some preferences and insisted on them. Not really"*

Patient #1

Other patients also reported limited participation in the decision-making process. The lack of knowledge and understanding of their disease affected their participation. They were not encouraged by their healthcare providers to ask questions about their condition and treatment options.

"I did not discuss anything with him. He did not let me discuss. For example, if you try to ask something, he will tell "Yes, yes... I know, I know" ...like this. Even my husband got angry... you want to ask something, but he is not letting you ask"

Patient #10

"The nurse entered the operating theatre, showed him [the endocrine surgeon] my report during the surgery [other patient's], and got his answer that surgery should be done.

We went home and had to come back on Monday to take the tests and go for the surgery, but I was not ready.

… On the way home, the nurse called and asked to come quickly as the doctor must go abroad for vacation. We went right there, took the tests, the nurse informed us that the treatment is surgical, I did not see the surgeon, then underwent surgery the following day".

Patient #6

Trust in health care providers

The vast majority of patients reported lack of trust towards their healthcare providers' professional skills which made them approach more than one doctor. Approaching more than one doctor often resulted in contradicting opinions and confused patients.

"I went to several places [medical centers], before the surgery I had ultrasound examinations performed by different specialists because I do not trust people, especially specialists. If such a serious diagnosis is made, I will not rely on what [only] one [provider] might say"

Patient #4

"Frankly speaking, given my experience of many years with health care providers, I approached many of them, I do not know…, but I do not believe doctors"

Patient #5

The lack of trust was especially true for patients from regions. Patients believed that doctors in Yerevan were better and more reliable but that services were not affordable. During the interview, the clinicians confirmed that belief among patients.

"I live in a region where everything is accessible, but there is no trust...I do not know, for me it was easier to trust a doctor from Yerevan"

Patient #9

All healthcare providers pointed out that both endocrinologists and endocrine surgeons have an essential role in the care of TC patients. However, they told that patients had more trust in surgeons rather than endocrinologists because of their culture-influenced values. This statement was confirmed by the patients.

"Even though I asked the endocrinologist in my region about medication dosage, I did not trust that answer and always the final one for me was my surgeon's word..."

Patient #2

"I was under the dispensary? supervision where I was advised to do the radiation therapy. But as I have already said, I was more interested in my surgeon's words, his words were more important to me, and he told me that RAI therapy would not give me anything, I would just be irradiated and that's it"

Patient #4

"...It is typical for our country that the patients trust the operating doctor more..."

Endocrine surgeon #1

5.5 Responsiveness and support

In general, patients reported that they were treated with respect and dignity by their treating doctors. According to them, their healthcare providers were responsive and approachable during their experience and showed their concern.

"My doctor is like a psychologist. He knows how to talk with people. When I visit him/her, he pronounces my name in a specific way which gives me power. The importance of the doctor cannot be overstated. When I ask a question, he/she responds in a friendly manner."

Patient #8

Increased satisfaction with care after surgery

Successful surgery substantially increased patients' overall satisfaction with care. All interviewed patients were satisfied with their surgery, noting that the surgeons had saved their lives. After the operation, the patients' anxiety decreased and there was a perception that surgeons healed them.

“The surgery passed successfully [the patients meant there were no complications following surgery]. I was discharged the next day and …came back to my routine activities and short after even do sports”

Patient #1

Even though they have had unanswered questions, the patients were satisfied with their received health care as they were alive.

“Only his indifference toward me...otherwise, I am very satisfied with the surgery, the whole process and everything. I would like to understand everything fully, I am not a doctor. I needed him to explain in detail”

Patient #10

Acceptance of hormone replacement therapy

Hormone replacement therapy was easily accepted by most patients. Only few of them mentioned that it was hard at the beginning but later they became used to it. Health care providers explained that most likely patients did not complain because after overcoming cancer taking medicine for the rest of one’s life is not a big deal; while patients who do not have cancer but should take drugs every day are more reluctant to do it.

The post-operative scar on the neck was accepted differently; some of the patients took it as “witness of their success”; a few of them were fine with it, while the rest explained that it reminds them of the tough times they went through. Generally, younger patients were more concerned about the size and appearance of their scar.

Social and psychological support

None of the patients reported receiving consultation from psychologists or other professionals who could provide supportive care. Some healthcare providers commented on the need for those specialists to help patients cope with their stress.

Almost all the patients reported the importance of having family support throughout their care.

"The patients definitely need psychological support. I do not know any patient who has professional psychological support, it is a serious gap"

Endocrinologist #3

"The support of my family members and friends brought me back, I became my old/previous self"

Patient #8

"Everyone, my family, friends supported as much as they could. I overcame it with them, we overcame it all together"

Patient #9

5.6 Health beliefs

Patients' beliefs about cancer in general and TC in particular have substantially affected their experience of TC diagnosis, treatment and follow up. When asked about how the diagnosis impacted their life, almost all of the patients characterized their diagnosis *as shocking, hard to accept, horrible* thing. Most of the patients were scared and depressed.

"I was surprised by all of this, thinking how could it happen to me. I did not have any symptoms and I have never thought that I would have any thyroid problem in my life"

Patient #2

"I lost myself, for me it was hard to accept. It is not easy to hear your diagnosis, it was like looking in the eyes of death. I thought it was the end of the world"

Patient #8

Almost half of the patients said that they have experienced fear and anxiety before the biopsy, mostly because of the stereotype that *touching the node will irritate it and turn it into malignant tumor, so one should not touch "sleeping things" [it means inactive nodule/mass which may become an aggressive tumor after biopsy.*

"My fear started from thinking about biopsy. I had already searched the internet for how it was going to be done and I was very much afraid at that moment"

Patient #9

Health care professionals reflected on the biopsy myth, stating that specialists such as physicians and surgeons sometimes advised patients not to perform the test.

Most of the patients had uncertainty about their future; they were concerned for their life and their families. A few of them even were crying during the interview.

"It was a hard time for me and my family, my mother was in panic, my husband was in shock, he didn't believe the diagnosis. No one in my family had any kind of thyroid problem, I was the first, I had three children, so I was scared. I had worries about my future, it was uncertain. I was trying to encourage my family, but I knew I was scared"

Patient #3

The fear of cancer recurrence was quite common among patients. They coped with that fear differently. Few of them literally ignored the feelings and tried to move on. Mostly patients shared their worries with family members.

"Even now I have worries, I can't stop myself from thinking about return of my cancer. I play with my children trying not to think about it, but I realize that it is quite possible."

Patient #3

However, there were patients who perceived the fact of recurrence as something inevitable''

"Whatever should happen [the patient meant the recurrence], will happen despite my thoughts."

Patient #8

"Good cancer" was a phrase used by healthcare providers to relax patients and explain that TC is not life-threatening and will not affect the amount and quality of their life.

"I heard something like that. He said that it is not a big deal and you should not fear the name of the cancer"

Patient #1

"All my doctors told me that this is the good one of all types of cancers, and I only need to take tablets and be under control and that calmed me down, decreased my anxiety"

Patient #3

6. Discussion

This study explored TC survivors' experience related to the diagnosis and treatment process in Yerevan, Armenia.

Five key elements of the Warwick Patient Experience Framework were used as a guide to form main categories of findings with relevant themes to shed light on TC survivors' experience.[49] These included continuity of care, communication and information, the patient as an active participant, and responsiveness.

Continuity of care considered all barriers and challenges encountered by patients in their care trajectory, starting from diagnosis, to treatment, and follow-up care.

Consistent with the literature, TC was mainly diagnosed by chance during routine check-ups by different specialists.[3,18,23] Interestingly, it was observed that ultrasound radiologists played a pivotal role in diagnosing TC. In fact, they were the ones who interpreted the test results and then referred the patients to the endocrine surgeon.

The period from diagnosis of thyroid cancer to treatment initiation varied from days to months, and was influenced by many factors, including poor adherence by the patients to the physician's recommendation, lack of awareness about the importance of initiating treatment as soon as possible, and financial status. Patients from the regions faced additional barriers including lack of specialists, and lack of trust in the quality of services provided. Some patients from regions outside of Yerevan had to travel to the capital hoping to find better care, which likely led to delayed cancer diagnosis.[63]

The patient's health-seeking behavior is influenced by trust and confidence in healthcare professionals.[64,65] Lack of confidence in primary health care providers was very common among the study participants. Also, patients felt unsafe using polyclinics services because of their perceived low quality, even though these services were free of charge.

This study found that most TC patients in Armenia were primarily treated by surgery despite recent evidence that partial or total thyroidectomy might not bear clear benefits for some patients.[66] Several researchers have cautioned that many TCs that might never cause symptoms in a person's life are currently overdiagnosed and overtreated with unnecessary surgery, leading to complications and long-term negative health effects. [16,25–27,29] In Armenia, the predominance of surgical treatment seems to be explained by both patient preferences and providers' choice, as discussed below. All of the study participants underwent surgery and or refused when offered other treatment options, such as active surveillance. These findings are similar to those of recent studies conducted in other countries, which reported that patients were more likely to choose surgery over active surveillance depending on their health belief, perception and various other factors.[23,19] One rationale noted by our study participants was the increased stress and anxiety created by the prospect of a tumor not being surgically removed.[23,31]

We found some inconsistencies in the diagnostic and treatment options chosen by the specialists across the country. While some were opposed to active surveillance and advised patients to have surgery right away, others were favored active surveillance for patients in low-risk groups.

One of the most concerning findings of this study was that some patients had discovered their TC diagnosis postoperatively without verifying their diagnosis first via a fine-needle biopsy. Such clinical mismanagement can result in increased stress among TC patients.

and lead to unnecessary surgeries and unjustified expenses in TC care.[5,22–24]

We found that in most cases, general and non-specialized surgeons dealt with TC patients in Armenia; consequently, postoperative disease classification and follow-up care might not be consistent with the guidelines, as general surgeons are not properly trained. Clinicians who participated in this study mentioned that the non-specialized surgeons were mostly trained during times and that their practice has been continuously decreasing.

Some participants believed that doing a biopsy can transform the benign mass into cancer. It appeared that this ‘biopsy myth’ has been spread by some healthcare providers. This myth appears to be widespread among cancer patients, and the literature suggests that increasing patient awareness through appropriate doctor-patient interaction and programs can help dispel it.[67,68]

Long-term follow-up is an essential aspect of the continuity of care for any cancer survivors, to maintain the appropriate quality of life.[45] We found that, based on patient preference, postoperative surveillance in Armenia was done by ES. Physicians who participated in the study explained this by the culturally ingrained belief that surgeons were more qualified than physicians (e.g., endocrinologists, or medical oncologists). A similar attitude has been described in the literature.[41] Our study participants valued surgeons more, and considered them ‘lifesavers,’ which might explain why almost half of the patients preferred surgeons for every aspect of care, even though they were dissatisfied with the length of time and content of the consultations delivered by surgeons.

Though a multidisciplinary team is recommended for follow-up care [51], typically, only one physician carries out follow-up care in Armenia, thus increasing the likelihood of inaccurate treatment plan and missed cancer recurrence, as well as untreated but preventable complications.[4,12]

Our findings revealed numerous barriers to care, the most important of which was financial. Both patients and providers reported that those with TC diagnosis might delay their treatment or leave it incomplete because of financial constraints.

Although cancer surgeries have been free of charge in Armenia since June of 2019, only few of our participants, including healthcare providers, were aware of the financial assistance program. This finding highlights the importance of increasing public awareness about the country's current programs and policies aimed to improve TC care and remove barriers to it.

COVID pandemic was one of the major challenges to the continuity of care in our study – a phenomenon observed in many countries accross the globe since the start of the pandemic.[69] Because of COVID-related restrictions, patients could not leave the country to obtain care elsewhere, while radioactive iodine could not be imported into Armenia since March 2020. Furthermore, patients skipped regular check-ups and visits, fearing coronavirus infection. This slowed down their cancer care and decreasing their quality of life because they had to take higher doses of the thyroid hormone to maintain cancer suppression therapy.

Fragmented care was another barrier to successful TC treatment revealed in this study. Due to the lack of interdisciplinary cooperation, which is one of the major drawbacks of the Armenian health system, TC survivors had to consult with numerous health care providers in various medical centers. The absence of multidisciplinary teams in cancer care hinders desirable patient outcome and efficient allocation of resources[4,12] Indeed, previous studies have shown that integrated care is highly correlated with positive patient experience.[70]

The lack of systemic coordination and guidance makes patients more determined to select their medical team on their own. In turn, this might violate the ordinary sequence of TC diagnostic path and affect patient experience quality.[2,3,51]

The doctor-patient relationship begins and forms from the very first contact, setting the tone for future communication.[71–73] The disclosure of the diagnosis is the first step that largely determines the subsequent interactions.[71–73] This study showed that the acceptable practice for communicating the diagnosis is not always followed in Armenia. In most cases the discussion was brief and lacked clear explanations; in one case, the patient learned about the diagnosis over the phone.

A randomized online study conducted to assess the impact of medical terminology on chosen treatment options showed that the patient could choose a more or less aggressive treatment based on how he/she is informed about cancer. Hence, the very first definition/interpretation of thyroid cancer to a patient had a significant role in future treatment plans.[74] Our study found that patients were not given adequate details about their conditions, particularly with regard to their follow-up care. In addition, due to mistrust and inconsistencies in the received information, multiple specialists were approached by the patients. Consistent with previous studies, most patients in our study checked the internet for information and took their family members' and friends' advice.[75,76]

The adequacy and quality of the provided information may enable patients to engage in self-care and make them active participants in their treatment process, which is one of the essential requirements for high quality of care.[49,71,72] It was difficult to judge the degree of patient involvement in TC treatment in Armenia, as neither the patients nor the physicians had a clear idea of the concept of shared decision-making.

Physicians in this study understood a patient-centered approach, mostly as spending enough time with patients to help mitigate patients' emotional stress, overcome barriers, and achieve therapeutic goals.

At the same time, most patients considered physicians more knowledgeable than themselves and refrained from interfering with the specialists' decisions, reflecting a paternalistic type of doctor-patient relationship.[72] It has been noted that failure to perceive the patient as an equal partner to the physician might be culturally acceptable. As a result of this misperception, the physicians fails to prioritize the patient's need and or to spend sufficient time explaining details, and places his/her professional opinion above that of the patient's in care decisions.[72]

Receiving a diagnosis of cancer increases the need for support from family and friends, and this support positively affects the patient's perception of their experience and their ability cope with stress.[77] Consistent with other studies, our findings confirmed that patients faced anxiety, uncertainty, and fear during their diagnosis-treatment journey.[45] Some of the participants did not seek psychological support though they reported a need for it, and developed mechanisms to cope with their stress on their own, often by spending time with family and children, and engaging in everyday life. The phrase 'good cancer' was used by physicians during consultations to alleviate negative attitudes towards cancer. Interestingly, it did not cause patients to be taken seriously, in contrast to the literature.[47]

Strengths and limitations

Technical issues with the student investigator's Internet connection disrupted the interview flow in some cases, causing inconvenient conditions and potentially affecting the quality of the information obtained.[56]

The present study involved physicians only from Yerevan. The inclusion of providers from other regions of Armenia could help reveal additional challenges and barriers to care and increase the generalizability of our findings. Also, while the study described the TC patient experience, the findings might not be transferrable to patients with more aggressive types of cancers.

The fact that the student investigator was an endocrinologist might have induced an insider effect among physicians and led to social-desirability bias among patients .[34,39,40,41] Although the scope of five years is a relatively short period, patients' recall bias may still be an issue in this study.

This was the first study to explore this topic in Armenia and the first qualitative study which was conducted using online data collection mode. This mode ensured the safety of patients during the pandemic and helped to save time and resources.

Triangulation between patients and physicians is one of the strengths of this work. It helped capture multiple facets of TC care in Armenia and identified issues that can be a stepping stone for future cancer care improvement initiatives. Findings should help to enhance TC care in Armenia, and make it more timely, affordable, and better coordinated.

Quantitative research is needed to objectively measure the revealed concepts, explore the determinants of quality TC care and generalize findings to a larger population.

7. *Recommendations*

Based on our findings, we recommend using informational technologies in TC care to connect patients and providers through the development and maintenance of a population-based electronic thyroid cancer registry, which will centralize the cancer care eliminating issues with fragmented care, enable multidisciplinary care, and provide opportunities for further clinical research.[78] We recommend organizing continued education programs for endocrinologists, endocrine surgeons, ultrasound radiologists, and primary health care providers to ensure that their knowledge and skills are up to date and to improve quality of care. Also, trainings on patient counselling skills could help improve provider-patient communication which has been found to be inadequate in our study. The Agency for Healthcare Research and Quality suggests a number of programs that can be implemented in Armenia, advancing all aspects of patient experience.[79]

To empower TC patients, we suggest having separate programs to raise their awareness of existing government programs for TC care, inform their rights and roles in their healthcare, and make them active participants in decision-making. ThyCa.org is one of the existing global platforms that aims to meet the needs and goals of TC patients while also serving as a resource and support center.[80]

In conclusion, this study was successful in looking into TC survivors' experiences and associated challenges in Armenia from the patients' and healthcare providers' perspectives. The findings illustrated distinct patterns of TC diagnosis and treatment pathways and revealed valuable insights into the barriers. This project could serve as a roadmap for health care providers to better understand and meet patients' needs.

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Tables

Table 1. Socio-demographic characteristics of patients

Characteristics	**Patients (N=10)**	**Healthcare Providers (N=6)**
Sex		
Male	1	3
Female	9	3
Residence		
Yerevan	5	6
Other Regions of Armenia	5	0
Age, Mean (Range)	36 (23-50)	39 (29-56)
Marital status *		
Single	1	
Married	7	
Widowed	0	
Divorced/Separated	2	
Education		
High school completed (10-12 years)		
Professional technical education	2	
Institute/University	4	
Post-graduate	3	
	1	
Employment		
Yes	8	
No	2	
Family history of TC		
Yes	5 *(non-cancer)*	
No	5	
Monthly expenditures		
From 100,000 AMD and less (~ 190 USD)	0	
From 100,001 - 200,000 AMD (~ 190-380 USD)	5	
From 200,001 - 300,000 AMD (~ 380-575 USD)	3	
Above 300,000 AMD (~575 USD)	1	
Don't know/ Refuse to answer	1	
Years of experience Mean, Range		15.5 (5-30)
Social media applications used to conduct the interviews		
WhatsApp	4	3
Viber	2	1
Messenger	3	1
Zoom	0	1
Phone call	1	0

Table 2. The Warwick Patient Experience Framework

Generic themes	Description
Communication	The process of interaction with doctors throughout the diagnosis and treatment, revealing any challenges or barriers experienced by patients,
Information	The adequacy of provided information related to the disease, diagnosis, treatment options, including benefits and risks, side effects and following surveillance
The patient as an active participant	Important role of the patient in the decision-making process about care and treatment. A patient is free to choose the health care team or centre in charge of his/her health. Furthermore, patient should be empowered by clinicians to ask questions and collaborate with them sufficiently
Continuity of care	The process of the follow-up after diagnosis, further communication and care plan, reliable relationships with the health care providers
Responsiveness	Responsiveness of health care providers to the patients' needs, preferences and values considering individuals' expectations of service

Appendices

Appendix 1. Warwick framework

Generic theme	Narrative description
Patient as active participant	Reflects the role of patients as potential active participants in their health care, co-creators and co-managers of their health and use of services; responsible for self-care, participators in health care, shared decision-makers, self-managers, risk managers and life-style managers. Confidence in self-management is critical. Associated with issues of power and control.
Responsiveness of services—an individualized approach	Needing to be seen as a person within the health care system. The responsiveness of health services in recognizing the individual and tailoring services to respond to the needs, preferences and values of patients, taking into account both shared requirements and individual characteristics (such as individuals' expectations of service cultural background, gender, subtle issues such as preferences for humour). Includes how well clinical needs are met (e.g. pain management) and evaluation of how well services perform from a patient perspective.
Lived experience	The recognition that individuals are living with their condition and experiencing it in a unique way, that family and broader life need to be taken into account and that all of these aspects of lived experience can affect self-care. Taking into account individual physical needs and cognitive needs because of condition. Everyday experiences, hopes, expectations, future uncertainty, feelings of loss, feelings of being morally judged and feelings of blame. Some of these experiences originate 'outside' of the health care system but are brought with the patient into the health system; other experiences may be affected by attitudes and expectations of health professionals.
Continuity of care and relationships	Initiating contact with services, interpretation of symptoms, co-ordination, access (barriers to), and availability of services, responsiveness of services and feelings of abandonment (when treatment ends or support is not made available). Being known as a person rather than 'a number'. Trust in health care professional built up over time. Recognition/questioning of expertise of health care professional. Respect, including respect for patient's expertise. Partnership in decision-making. Issues of power and control.
Communication	Needing to be seen as an individual; communication style and format (e.g. over telephone or in person); skills and characteristics of health care professional; body language (which can convey different information from that spoken); two-way communication and shared decision-making; compassion, empathy; the importance of the set-up of consultation (e.g. appropriate time for questions, appropriate physical environment and number of peoples present). Listening and paying attention to the patient. Enabling questions and providing answers.
Information	Information to enable self-care and active participation in health care, importance of information in shared decision-making, tailored information to suit the individual, patient wanting/not wanting information and timely information. Sources of information, including outside the health service (e.g. peer-support, internet). Quality of information. Sources of further information and support. Developing knowledge and understanding, and making sense of one's health.
Support	Different preferences for support: Support for self-care and individual coping strategies. Education. Need for emotional support, and need for hope. Responsiveness of health care professionals to individual support needs (may vary according to gender, age and ethnicity). Importance of peer-support, groups and voluntary organizations. Practical support. Family and friends support. Role of advocacy. Feeling over-protected, not wanting to be a burden.

Appendix 2. Interview guide for in depth interview with patients via video call (English version)

Interviewer ID______________________

Participant ID ______________________

Type of video call ___________________

Interview date _ _ _/_ _ /_ _ _ _ (mm/dd/yyyy)

Interview start time _ _: _ _ (hh:mm) 24-hour format
Interview end time _ _: _ _ (hh:mm) 24-hour format

Dear …, I would like to thank you one more time for taking time and agreeing to participate. You have come a long way with your thyroid problem. I admire your courage and spirit. It would be amazing to be a part of your journey.
How do you feel yourself?

1. Let's talk a little bit about your pathway. Can you please describe your experiences of going through the diagnosis process of your thyroid problem?

   Probe: *How long ago was it? Which symptoms did you have? How long did it take for people to diagnose your illness, what specialists examined you before you got diagnosed? How and when did you confirm your diagnosis?*

2. What were the main challenges while going through the diagnostic process? Why were there challenges? How did you overcome them?

   Probe*: Difficulties with finding specialists, trust towards them? Fear from biopsy? Lack of information? Difficulties with blood tests, biopsy, imaging tests? Unable to afford the tests? Tests not available in the region where you live.*

3. What do you remember about the period when you were first told about your diagnosis? What did you feel? How was the information explained/provided to you? What can you say about worries?

Probe: *Worries about your future? Uncertainty and fear of your diagnosis? Compared to when you first found out about your cancer, what is your level of worry now?*

4. How did the diagnosis impact on (emotionally) you or relationships with friends, family members? Whom did you talk with when you had worries and fears related to your condition/treatment?

   Probe: *Did you discuss it with your doctor? How did he/she react?*

   (Have you ever been told that you have a "good type" of cancer? – ask if the type of cancer is Papillary Thyroid Carcinoma)

5. Tell me about your doctor's attitude/behavior towards you or your relatives during your consultations?

   Probe: *What can you say positive and negative about the attitude of your physician? Respectful? Patience?*

6. How would you appraise your received information about your diagnosis, treatment options and related complications? How would you characterize the discussion of your test results with your doctor(s)? Could you tell more about the treatment options that you were offered?

   Probe: *Did you discuss possible side effects? What about pain management? Scar on the neck? Fear of recurrence?*

7. Please tell me more about how your care plan was chosen (by whom). Have you had any preferences/suggestions? Why? How did doctor(s) take your preferences and needs into account?

   Prob*e: Did he or she change anything in the proposed care plan based on your preferences/suggestions? Why/how?*

8. Please share with me about the period when you got your treatment? The type of the treatment, the length. Where it was and how? What were the main challenges associated with the treatment? Why?

   Probe: *Financial issues? Transportation? Time? Related to surgery, radioiodine therapy, chemotherapy?*

9. What did you do when you needed to ask questions about your treatment? How did you approach your physician? How did you feel about the length of time you had to wait before you talked with them?
   Probe: *Were all answers sufficiently explained for you afterward? Waiting time?*

10. In general, there can be several physicians following up patients with thyroid problem (cancer). Could you share your experience? How did you choose your main doctor? Why? What factors have influenced?

   Probe: *Did you consider experience? Cost-related issues?*
   Did you ever try to get an opinion from other specialists?

11. How often did you see or talk to your doctor(s) since your surgery? Who prescribed you hormone replacement therapy (endocrinologist, endocrine surgeon, oncologist or another doctor)? Who does control your dosage regimen? How?

   Probe: *How often do you have blood tests, imaging tests? What are the associated challenges and how do you overcome them?*

12. Given your experience, what could improve the diagnostic and treatment services for TC in Armenia?

13. Would you like to add anything that we didn't discuss yet but you think it is important?

***

If you do not mind we can end up with few questions about yourself.

1.	Your gender? *Do not read*	1. ☐ Male 2. ☐ Female
2.	What is your age as of your last birthday?	_ _ _ _
3.	Where do you live?	1. ☐ Yerevan 2. ☐ Region (please, specify) __________________
4.	What is your marital status?	1. ☐ Single 2. ☐ Married 3. ☐ Widowed 4. ☐ Divorced/Separated
5.	What is your completed educational level?	1. ☐ Secondary school (less than 10 years) 2. ☐ High school completed (10-12 years) 3. ☐ Professional technical education 4. ☐ Institute/University 5. ☐ Post-graduate
6.	Are you employed?	1. ☐ Employed 2. ☐ Unemployed 3. ☐ Retired
7.	On average, how much money does your family spend monthly?	1. ☐ Less than 50,000 drams 2. ☐ From 50,000 - 100,000 drams 3. ☐ From 100,001 - 200,000 drams 4. ☐ From 200,001 - 300,000 drams 5. ☐ Above 300,000 drams 88. ☐ Don't know/ Refuse to answer

8.	Among your direct relatives (parents, sisters and brothers) has anyone ever had thyroid cancer? If YES, what was their relation to you?	1. ☐ Yes 2. ☐ No 3. ☐ I don’t know ------------------

Thank you for tour time and participation!

Overall, how would you rate your care?

Very poor Very good

0 1 2 3 4 5 6 7 8 9 10

Appendix 3. Interview guide for in depth interview with patients via video call (Armenian version)

Հիվանդների հետ տեսազանգի միջոցով անհատական հարցազրույցի համար ուղեցույց (հայերեն տարբերակ)

Հարցազրուցավարի ID______________________

Մասնակցի ID______________________________

Տեսազանգի տեսակը ________________________

Ամսաթիվ _ _/_ _ /_ _ _ _ (ամիս/օր/ տարի/)

Հարցազրույցի սկսման ժամ _ _ :_ _ (ժամ:րոպե) 24-ժամյա ձևաչափ
Ավարտ _ _ :_ _ (ժամ:րոպե) 24-ժամյա ձևաչափ

Հարգելի … Ես կցանկանայի ևս մեկ անգամ շնորհակալություն հայտնել, որ համաձայնել եք մասնակցել և ժամանակ եք հատկացրել։ Դուք երկար ճանապարհ եք անցել Ձեր վահանաձև գեղձի խնդրի հետ կապված։ Ես հիանում եմ Ձեր քաջությամբ և ոգով։ Պատիվ կհամարեի լինել Ձեր պատմության մի մասը։
Ինչպե՞ ս եք Ձեզ զգում։

1. Եկեք մի փոքր խոսենք Ձեր անցած ճանապարհի մասին։ Խնդրում եմ կարո՞ղ եք կիսվել Ձեր փորձառությամբ, ինչպե՞ս եք իմացել, ախտորոշել, որ ունեք վահանաձև գեղձի խնդիր։

   Հուշում. *Որքա՞ն ժամանակ առաջ էր դա։ Ի՞նչ ախտանիշներ ունեիք։ Որքա՞ն ժամանակ է պահանջվել/որքան տևեց/, որպեսզի ախտորոշեն Ձեր հիվանդությունը/խնդիրը, ի՞նչ մասնագետներ են Ձեզ հետազոտել նախքան ախտորոշվելը։*
   Ինչպե՞ս և ե՞րբ հաստատվեց Ձեր ախտորոշումը։

2. Ի՞նչ դժվարությունների եք հանդիպել ախտորոշման ժամանակահատվածում։ Ինչու՞ հենց դրանք։ Ինչու՞ կային այդ դժվարությունները/խոչընդոտները։ Ինչպե՞ս հաղթահարեցիք դրանք։

   Հուշում. *Դժվարություններ մասնագետներ գտնելու հետ կապված, նրանց հանդեպ վստահություն։ Վախը բիոպսիայից։ Անհրաժեշտ ինֆորմացիայի պակաս։ Դ ժվարություններ կապված արյան* *անալիզների, բիոպսիայի, գործիքային հետազոտությունների հետ: Թեստերը/հետազոտությունները հասանելի չէին Ձեր տարածաշրջանում, որտեղ Դուք ապրում եք, մատչելի չէին:*

3. Ի՞նչ եք հիշում այն պահի մասին, երբ Ձեզ առաջին անգամ պատմեցին/ասացին Ձեր ախտորոշման մասին: Ի՞նչ զգացիք: Ինչպե՞ս է ինֆորմացիան բացատրվել / տրամադրվել Ձեզ: Ի՞նչ կարող եք ասել Ձեր անհանգստությունների մասին:

   Հուշում *. Մտավախություն Ձեր ապագայի մասին, Ձեր ախտորոշման անորոշությունն ու վախը:*
   Համեմատած այն ժամանակի հետ, երբ առաջին անգամ իմացաք ախտորոշման մասին, ինչպես կգնահատեք Ձեր անհանգստության մակարդակը այժմ:

4. Ձեր ախտորոշումը ի՞նչ ազդեցություն ունեցավ (հուզականորեն) Ձեզ կամ Ձեր ընկերների, ընտանիքի անդամների հետ հարաբերությունների վրա: Ու՞մ հետ եք խոսել, երբ Ձեր վիճակի / բուժման հետ կապված անհանգստություններ և վախեր եք ունեցել:

   Հուշում *. Դուք դա քննարկե՞լ եք Ձեր բժշկի հետ: Ինչպե՞ս է արձագանքել նա: Խնդրում եմ ավելի մանրամասն կասեք:*
   (Երբևէ ձեզ ասել են, որ քաղցկեղի «լավ տեսակ» ունեք. Հարցնում եք, եթե քաղցկեղի տեսակը վահանագեղձի պապիլյար կարցինոման է):

5. Կպատմեք ինձ, խնդրում եմ, Ձեր բժշկի վերաբերմունքի / պահվածքի մասին խորհրդատվությունների ընթացքում Ձեր կամ Ձեր հարազատների նկատմամբ:

   Հուշում*. Ի՞նչ դրական և բացասական բան կարող եք ասել այդ մասին: Հարգալից՞ : Համբերատար՞:*

6. *Ինչպե՞ս կգնահատեք ստացված ինֆորմացիան Ձեր ախտորոշման, բուժման տարբերակների և ուղեկցող բարդությունների մասին: Ինչպե՞ս կբնութագրեք Ձեր թեստի/հետազոտությունների արդյունքների քննարկումը Ձեր բժշկի(ներ) հետ: Կարո՞ղ եք ավելի մանրամասն պատմել Ձեզ առաջարկվող բուժման տարբերակների մասին:*

Յուշում. *Դուք քննարկե՞լ եք հնարավոր կողմնակի բարդությունները։*
Ի՞նչ կասեք ցավային ախտանիշների կառավարման մասին։
Սպի պարանոցի վրա։ Կրկնվելու վախը։

7. Խնդրում եմ, ավելին պատմեք ինձ այն մասին, թե ինչպես է ընտրվել/կազմվել Ձեր բուժման պլանը/ծրագիրը (ում կողմից, որ բժշկի)։ Որևէ նախընտրած տարբերակ կամ առաջարկություններ ունեցե՞լ եք։ Ինչո՞ւ։ Ինչպե՞ս է Ձեր բժիշկը(ներ) հաշվի առել դրանք (Ձեր նախասիրությունները և կարիքները)։

   Յուշում. *Արդյո՞ք նա փոխե՞լ է որևէ բան առաջարկվող բուժման պլանում՝ ելնելով Ձեր նախընտրություններից / առաջարկներից։ Ինչու, ինչպե՞ս։*

8. Խնդրում եմ, կիսվեք ինձ հետ Ձեր բուժման ժամանակահատվածի մասին։ Բուժման եղանակը, տևողությունը, որտե՞ղ եք ստացել և ինչպե՞ս։ Որո՞նք էին բուժման հետ կապված հիմնական խոչընդոտները։ Ինչու՞։

   Յուշում. *Ֆինանսակա՞ն խնդիրներ։ Փոխադրո՞ւմ։ Ժամանակը։ Կապված էր վիրահատության, ռադիոյոդ թերապիայի, քիմիաթերապիայի հետ։*

9. Երբ բուժման հետ կապված հարցեր ունեիք, ի՞նչ էիք անում։ Ինչպե՞ս էիք գտնում/ինչ եղանակով էիք դիմում Ձեր բժշկին։ Ի՞նչ կասեք այն ժամանակի մասին(երկարության), որը Դուք պետք է սպասեիք, մինչ նրանց հետ հանդիպելը/խոսելը։

   Յուշում. *Արդյո՞ք բոլոր հարցերի պատասխանները բավականաչափ բացատրվում էին Ձեզ հետո։ Սպասելաժամանակը*։

10. Ընդհանրապես վահանաձև գեղձի խնդիր(քաղցկեղ) ունեցող մարդկանց կարող են հետևել մի քանի բժիշկներ։ Կարո՞ղ եք կիսել Ձեր փորձը։ Ինչպե՞ս ընտրեցիք Ձեր հիմնական բժշկին։ Ինչո՞ւ։ Ի՞նչ գործոններ են ազդել Ձեր որոշման վրա։

    Յուշում. *Դուք հաշվի առել եք աշխատանքային փորձը։*
    Արժեքի/գումարի հետ կապված խնդիրներ։
    Երբևէ փորձե՞լ եք կարծիք ստանալ/իմանալ այլ մասնագետներից։

11. Որքան հաճախ եք հանդիպում կամ զրուցում Ձեր բժշկի(ներ) հետ Ձեր վիրահատությունից ի վեր: Ո՞վ է Ձեզ նշանակել հորմոնալ փոխարինող թերապիան (էնդոկրինոլոգ, էնդոկրին վիրաբույժ, ուռուցքաբան կամ մեկ այլ բժիշկ): Ո՞վ է վերահսկում Ձեր դեղաչափը: Ինչպե՞ս:

    Հուշում. *Որքա՞ն հաճախ եք հանձնում արյան անալիզներ, կատարում գործիքային հետազոտություններ (վահանագեղձի սոնո) : Որո՞նք են կապված դժվարությունները/խոչընդոտները և ինչպե՞ս եք դրանք հաղթահարում/լուծում:*

12. Հաշվի առնելով Ձեր փորձը, նշեք խնդրեմ ինչը կարող ենք բարելավել վահանագեղձի խնդիր(քաղցկեղ) ունեցող մարդկանց ախտորոշիչ և բուժիչ ծառայությունների մեջ Հայաստանում:

13. Կցանկանայի՞ք ավելացնել որևէ բան, որը մենք դեռ չենք քննարկել, բայց կարծում եք, որ կարևոր է:

***

Եթե դեմ չեք, կցանկանայի մի քանի հարց էլ տալ ու ավարտել :

1.	Ձեր սեռը: *Չկարդալ*	1. ☐ Արական 2. ☐ Իգական
2.	Ձեր տարիքը Ձեր վերջին ծննդյան օրը:	________ տարի
3.	Որտեղ եք բնակվում:	1. ☐ Երևան 2. ☐ Մարզ (խնդրում եմ նշեք) ______________________________
4.	Ձեր ամուսնական կարգավիճակը:	1. ☐ Չամուսնացած 2. ☐ Ամուսնացած 3. ☐ Ամուսինը մահացած

		4. ☐ Բաժանված
5.	Ի՞նչ կրթություն ունեք :	1. ☐ Դպրոց (10 տարի պակաս) 2. ☐ Դպրոց (10-12 տարի) 3. ☐ Միջին մասնագիտական կրթություն 4. ☐ Ինստիտուտ/Համալսարան 5. ☐ Հետդիպլոմային
6.	Դուք աշխատում եք:	1. ☐ Աշխատում եմ 2. ☐ Չեմ աշխատում 3. ☐ Թոշակառու եմ
7.	Միջինում ամսական որքա՞ն գումար է ծախսում Ձեր ընտանիքը:	1. ☐ Քիչ քան 50,000 դրամ 1. ☐ Սկսած 50,000 մինչև 100,000 դրամ 2. ☐ Սկսած 100,001 մինչև 200,000 դրամ 3. ☐ Սկսած 200,001 մինչև 300,000 դրամ 4. ☐ Ավել քան 300,000 դրամ 5. ☐ Չգիտեմ /Հրաժարվում եմ պատասխանել
8.	Ձեր անմիջական հարազատների մեջ ծնողներ, քույր, եղբայր, որևէ մեկը ունի վահանագեղձի քաղցկեղ/խնդիր: Եթե այո, ապա ով:	1. ☐ Այո 2. ☐ Ոչ 3. ☐ Չգիտեմ -----------------------

Շնորհակալություն Ձեր ժամանակի և մասնակցության համար:

Ընդհանուր առմամբ, ինչպես կգնահատեք Ձեր բուժում/խնամքը:

Շատ վատ Շատ լավ

0 1 2 3 4 5 6 7 8 9 10

Appendix 4. Interview guide for in depth interview with physicians via video call (endocrinologists and endo-surgeons)

Interviewer ID____________

Participant ID ____________

Type of video call __________

Interview date _ _ _/_ _ /_ _ _ _ (mm/dd/yyyy)

Interview start time _ _: _ _ (hh:mm) 24-hour format
Interview end time _ _: _ _ (hh:mm) 24-hour format

Dear Dr. …, I would like to thank you one more time for taking time and agreeing to participate taking into consideration your busy schedule.

1. Let's start by talking about the role of endo-surgeons in the Thyroid cancer diagnostic and treatment process in Armenia. Can you share your experience?

   Probe: *How often do you see such patients? How do patients approach you?*

2. Could you describe the typical pathway of patient experience with TC in Armenia? Which specialists do they approach first with their symptoms? How do they get their diagnosis?

   Probe: *Do they come directly to you or are they referred to you? What about patients from regions outside of Yerevan? Is their pathway different?*

3. In general, how long it takes to get the diagnosis after first symptoms? What can you say about treatment initiation. Does it immediately follow the diagnosis? If not, why?

   Probe: *Difficulties with confirming interventions (biopsy) or blood tests, because of fear or cost issues? Inaccessibility of some services?*

4. What is the mode of TC detection at your clinic? Can you elaborate on that, please? How do you validate the diagnosis (blood tests, imaging methods)? Do you think some patients are over diagnosed? Why?

How do you communicate information about their diagnosis? How would you characterize their reaction to the diagnosis? Do they openly discuss their needs and preferences?
Probe: *Do you discuss the test results, biopsy, at what level of detail? Do you communicate with patients directly or with their friends/relatives?*

5. What are the treatment options available to TC patients in Armenia? (surgery, radiotherapy, chemotherapy)? Where/how do they get the treatment? What are the options at your clinic? Are they different from the current diagnostic and treatment approaches of TC in the world? What are the differences? How do you make decisions about the treatment plan? What are the factors that you take into consideration? Do you think there should be/will be changes in the treatment approaches in the future?

   Probe: *Are there any guidelines that you follow in your practice? What are the sources of information that you consult about the treatment approaches?*

6. Do you address patients' preferences or needs while choosing treatment plan and how? Do you discuss side effects with them, pain management and further care plan?

   Probe: *Have you ever adjusted the proposed plan based on patients' preferences? How did it happen?*

7. Can you tell me more about any challenges in your practice regarding diagnosis and treatment? What are they, why?

   Probe: *Reliability of imaging tests, test results? Patients uncertainty about their condition, lack of trust towards health care services, lifelong hormone replacement therapy? Fear of intervention (biopsy), surgery, radiation, complications? Transportation? Cost issues? Inaccessibility of services?*

8. How do you think that the manner by which TC is diagnosed impacts patients or friends, family members? What are the main challenges they experience throughout the process of diagnosis and care?

   Probe: *Anxiety, uncertainty of future? Financial difficulties? Difficulty to find appropriate specialists, fear from biopsy, misinformation? Transportation? Accessibility of iodine therapy in Armenia? Time?*

9. How would you characterize the nature and rate of the complications? Who treats them and how?

   Probe: *Surgery? Radioiodine therapy? Chemotherapy?*

Complications (what kind of complications? How often to people have complications)?

10. Ideally, the multidisciplinary team should follow-up patients with thyroid cancer. Could you share your experience? How is it typically done in Armenia?

    Probe: *Who follows-up with the patient (or provides follow-up care) after surgery (radioiodine therapy)? Why that (those) doctor(s)?*

    Regular check-ups, blood tests, imaging methods? Frequency?

11. When your patients have worries and fears of their condition/treatment how do you handle the situation? Do you talk with relatives/family members?

    Probe: *Any difficulties? Fear of recurrence, death?*
    In your opinion is the health care system supportive for such patients in Armenia?

    Have you ever told your patients that they have a "good type" of cancer?

12. What can you tell about the governmental program for cancer patients existing in Armenia? What do you know about it? Are patients aware of it?

    Probe: *From what sources? If no, how do you address that gap in knowledge in your practice?*

13. Given your experience, what would be your recommendations to improve the diagnostic and treatment services for TC in Armenia?

    Probe: *Better collaboration within multidisciplinary team? Qualified ultrasound, biopsy experts, tests? What about radiotherapy, chemotherapy? Patient register?*

14. Would you like to add anything that we didn't discuss yet but you think it is important?

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If you do not mind we can end up with few questions about yourself.

Thank you for tour time and participation!

1.	Your gender? *Do not read*	1. ☐ Male 2. ☐ Female
2.	What is your age as of your last birthday?	_ _ _ _
3.	Where do you practice?	1. ☐ Yerevan 2. ☐ Region (please, specify) __________________
4.	How many years have you practiced as an endo-surgeon?	---- years

How would you characterize your patients' overall satisfaction of care?

Very poor Very good

0 1 2 3 4 5 6 7 8 9 10

Appendix 5. Interview guide for in depth interview with physicians via video call (endocrinologists and endo-surgeons) (Armenian version)

Բժիշկների հետ տեսազանգի միջոցով հարցազրույցի համար ուղեցույց (հայերեն տարբերակ)

Հարցազրուցավարի ID____________________

Մասնակցի ID____________________________

Տեսազանգի տեսակը _____________________

Ամսաթիվ _ _/_ _ /_ _ _ _ (ամիս/օր/ տարի/)

Հարցազրույցի սկսման ժամ _ _ :_ _ (ժամ:րոպե) 24-ժամյա ձևաչափ
Ավարտ _ _ :_ _ (ժամ:րոպե) 24-ժամյա ձևաչափ

Հարգելի բժիշկ..., Ես կցանկանայի ևս մեկ անգամ շնորհակալություն հայտնել, որ համաձայնել եք մասնակցել և հաշվի առնելով Ձեր խիտ գրաֆիկը՝ ժամանակ եք հատկացրել։

1. Եկեք սկսենք խոսել էնդո-վիրաբույժների/էնդոկրինոլոգների դերի մասին վահանաձև գեղձի քաղցկեղի ախտորոշման և բուժման գործընթացում։ Կարո՞ղ եք կիսվել Ձեր փորձով։ խնդրում եմ։

   Հուշում. *Որքա՞ն հաճախ եք տեսնում այդպիսի հիվանդների։ Ինչպե՞ս են Ձեզ գտնում/մոտենում հիվանդները։*

2. Կարո՞ղ եք նկարագրել վահանագեղձի ուռուցքով հիվանդի փորձառությունը/անցած ճանապարհը Հայաստանում։ Ո՞ր/ինչ մասնագետի են նախևառաջ մոտենում, երբ ախտանիշներ են ունենում։ Ինչպե՞ս է նրանց ախտորոշումը կատարվում/դրվում։

   Հուշում. *Նրանք անմիջապես են գալիս Ձեր մոտ, թե՞ ուղեգրում են։ Ի՞նչ կասեք մարզերից հիվանդների մասին, արդյոք նրանց ճանապարհը/փորձառությունը տարբեր է։*

3. Ընդհանրապես, որքա՞ն ժամանակ է հարկավոր, որպեսզի ախտորոշումը դրվի/կատարվի առաջին ախտանիշներից հետ։ Ի՞նչ կարող եք ասել բուժման մեկնարկի մասին։ Անմիջապես է հետևում ախտորոշմանը։ Եթե ոչ, ապա ինչու՞։

Հուշում. *Դժվարություններ կապված ախտորոշիչ միջամտությունների/բիպոսիա/ կամ արյան անալիզների հետ, վախի կամ ֆինանսական խնդիրների պատճառով: Որոշ ծառայությունների անհասանելիություն:*

4. Ո՞րն է վահանագեղձի քաղցկեղի հայտնաբերման մոտեցումը Ձեր կլինիկայում: Կարո՞ղ եք այդ մասին ավելի մանրամասն ասել, խնդրում եմ: Ինչպե՞ս եք հաստատում ախտորոշումը (արյան անալիզներ, գործիքային հետազոտություններ): Ի՞նչ եք կարծում, որոշ հիվանդներ գերախտորոշվում են արդյոք: Ինչո՞ւ:
   Ինչպե՞ս եք հիվանդներին հաղորդում ինֆորմացիան իրենց ախտորոշման մասին: Ինչպե՞ս կբնութագրեք նրանց արձագանքը ախտորոշմանը: Արդյո՞ք նրանք ազատ են իրենց կարիքներն ու նախասիրությունները քննարկելիս:

   Հուշում. *Ինչպե՞ս/Ի՞նչ մանրամասնությամբ եք Դուք քննարկում հետազոտության արդյունքները, բիոպսիա նրանց հետ: Դուք հիվանդների հետ անմիջականորեն եք շփվում թե նրանց ընկերների / հարազատների միջոցով:*

5. Որո՞նք են Հայաստանում հասանելի/առկա բուժման եղանակները վահանագեղձի ուռուցքով հիվանդներ համար (վիրահատություն, ռադիոթերապիա, քիմիաթերապիա): Որտե՞ղ / ինչպե՞ս են նրանք ստանում բուժումը: Որո՞նք են Ձեր կլինիկայում առկա տարբերակները: Արդյո՞ք դրանք տարբերվում են աշխարհում առկա ներկայիս ախտորոշման և բուժման մոտեցումներից: Որո՞նք են տարբերությունները: Ինչպե՞ս եք որոշում կայացնում բուժման պլանի վերաբերյալ: Որո՞նք են այն գործոնները, որոնք հաշվի եք առնում: Ի՞նչ եք կարծում, արդյոք ապագայում պետք է փոփոխություններ մտցնել բուժման մոտեցումներում:

   Հուշում. *Կա՞ն ուղեցույցներ, որոնց Դուք հետևում եք Ձեր պրակտիկայում: Որո՞նք են այն տեղեկատվության աղբյուրները, որոնց հետ խորհրդակցում եք բուժման մոտեցումների վերաբերյալ:*

6. Բուժման պլանը ընտրելիս, Դուք հաշվի առնում եք հիվանդների նախասիրությունները և կարիքները, ինչպե՞ս: Քննարկում եք արդյոք նրանց հետ կողմնակի բարդությունները, ցավի համախտանիշի կառավարումը, հետագա խնամքի պլանը:

   Հուշում. *Դուք երբևէ փոփոխել եք բուժման պլանը՝ ելնելով հիվանդների նախասիրությունից/ցանկությունից: Ինչպե՞ս է պատահել:*

7. Կարո՞ղ եք ինձ ավելին պատմել ախտորոշման և բուժման հետ կապված դժվարությունների/խոչընդոտների մասին առկա Ձեր պրակտիկայում։ Որոնք են դրանք, ինչու՞։

    Հուշում. *Գործիքային հետազոտության տվյալների հուսալիությունը, թեստի արդյունքները։ Հիվանդների անորոշությունը իրենց վիճակի մասին, առողջության պահպանման համակարգի նկատմամբ անվստահություն։ փոխարինող հորմոնալ թերապիա ամբողջ կյանքի ընթացքում։ Վախը միջամտությունի(բիոպսիա), վիրահատությունից, ճառագայթումից, բարդություններից։ Փոխադրո՞ւմ։ Ֆինանսական խնդիրներ։ Որոշ ծառայությունների անհասանելիություն։*

8. Ի՞նչ եք կարծում, վահանգեղձի ուռուցքի ախտորոշման եղանակը ազդում է հիվանդների կամ ընկերների և ընտանիքի անդամների վրա։ Որո՞նք են այն հիմնական դժվարությունները/մարտահրավերները, որոնց նրանք առերեսվում են ախտորոշման և խնամքի ողջ ընթացքում։

    Հուշում. *Անհանգստություն, տագնապ, ապագայի հանդեպ անորոշություն։ Ֆինանսական դժվարություններ։ Համապատասխան մասնագետներ գտնելու դժվարություն, վախ բիոպսիայից, ապատեղեկատվություն։ Փոխադրո՞ւմ։ Ռադիոյոդ թերապիայի հասանելիությունը Հայաստանում։ Ժամանակը։*

9. Ինչպե՞ս կբնութագրեք բուժման հետ կապված բարդությունների բնույթը և հաճախականությունը։ Ո՞վ է բուժում/կարգավորում դրանք և ինչպես։

    Հուշում. *Վիրահատություն։ Ռադիոյոդ թերապիա։ Քիմիաթերապիա։ Բարդություններ (ինչ բարդություններ։ Որքան հաճախ են հիվանդները ունենում բարդություններ)։*

10. Կատարյալ տարբերակում, մուլտիդիսցիպլինար թիմը պետք է հետևի վահանաձև գեղձի քաղցկեղով հիվանդներին։ Կարո՞ղ եք կիսվել Ձեր փորձով, խնդրում եմ։ Ինչպե՞ս է դա արվում սովորաբար Հայաստանում։

    Հուշում. *Ո՞վ է հետևում հիվանդին (կամ ապահովում հետագա խնամքը) վիրահատությունից հետո (ռադիոյոդ թերապիայից հետո)։ Ինչու՞ այդ բժիշկը(ներ)։*

    Պարբերաբար ստուգումներ, արյան անալիզներ, գործիքային հետազոտություններ։ Հաճախականությունը։

11. Երբ ձեր հիվանդները իրենց վիճակի բուժման հետ կապված անհանգստություններ և վախեր են ունենում, ինչպե՞ս եք կարգավորում իրավիճակը։ Խոսո՞ւմ եք արդյոք հարազատների/ընտանիքի անդամների հետ։

Հուշում. *Որևէ դժվարություն: Քաղցկեղի կրկնվելու վախը, վախը մահից: Ըստ Ձեզ, առողջապահության համակարգը աջակցող է նման հիվանդների համար Հայաստանում:*
Երբևէ ասել եք Ձեր հիվանդներին, որ նրանք քաղցկեղի «լավ տեսակ» ունեն:

12. Ի՞նչ կարող եք ասել Հայաստանում գոյություն ունեցող քաղցկեղով հիվանդների բուժման պետական պատվերի ծրագրի մասին: Ի՞նչ գիտեք այդ մասին: Արդյո՞ք հիվանդները տեղյակ են դրա մասին:

    Հուշում. *Ի՞նչ/որտեղից աղբյուրներից: Եթե ոչ, ապա ինչպե՞ս եք լրացնում այդ բացը Ձեր պրակտիկայում:*

13. Հաշվի առնելով Ձեր փորձը, որո՞նք կլինեն Ձեր առաջարկությունները Հայաստանում վահանագեղձի խնդիր(քաղցկեղ) ունեցող հիվանդների ախտորոշիչ և բուժիչ ծառայությունները բարելավելու և համակարգելու համար:
    Հուշում. *Ավելի լավ համագործակցություն տարբեր մասնագետների միջև: Որակավորված մասնագետներ ուլտրաձայնային ախտորոշման, բիոպսիայի ոլորտում կամ այլ: Իսկ ռադիոթերապիայի, քիմիաթերապիայի մասին ինչ կասեք: Հիվանդների համակարգված ռեգիստր:*

14. Կցանկանայի՞ք ավելացնել որևէ բան, որը մենք դեռ չենք քննարկել, բայց կարծում եք, որ կարևոր է:

***

Եթե դեմ չեք, կցանկանայի մի քանի հարց էլ տալ ու ավարտել :

1.	Ձեր սեռը: *Չկարդալ*	3. ☐ Արական 4. ☐ Իգական
2.	Ձեր տարիքը Ձեր վերջին ծննդյան օրը:	______ տարի

3.	Որտեղ եք աշխատում:	3. ☐ Երևան 4. ☐ Մարզ (խնդրում եմ նշեք) ___________________________
4.	Ձեր աշխատանքային փորձը:	_____ տարի

Շնորհակալություն Ձեր ժամանակի և մասնակցության համար:

Ընդհանուր առմամբ, ինչպես կգնահատեք Ձեր հիվանդների բավարարվածությունը իրենց բուժումից/խնամքից:

Շատ վատ Շատ լավ

0 1 2 3 4 5 6 7 8 9 10

Appendix 6. Oral Consent form for patients with TC (English version)

Oral Consent form for patients with TC (English version)

American University of Armenia

Institutional Review Board #1

Thyroid cancer survivors' experience in Armenia: a qualitative study

Hello, my name is Kristina. I am a graduate student of the Master of Public Health program of the Turpanjian School Public Health at the American University of Armenia. As part of my thesis work, I am conducting research to explore the life experiences of people with thyroid cancer. You are invited to participate in this study because you live in Armenia and have undergone surgery related to the thyroid cancer problem and we would like to know about your experience with the health service. You will be one of the 20 participants that are by chance selected to participate in this study in order to expand the understanding of diagnostic and treatment related difficulties among people who have thyroid problem in Armenia. To get the whole picture, physicians who treat patients with thyroid problems are also involved.

Participating in the study only involves this interview that will last for 45 minutes-1 hr. The interview will take place via video call.

Questions will cover different aspects of your experience: diagnostic and treatment processes, any challenges during that period, social support, etc. Your participation in this study is entirely voluntary. You may refuse to answer any question or stop the interview at any time. There is no penalty if you refuse to participate in this study. Your participation in this study will not lead to risk or any immediate benefit, but your sincere answers are extremely important to us and will help us better understand the needs of patients with thyroid problems, thereby contributing to improved quality of care.

The information provided by you will be used for the study purposes only. Your name or other contact information will not be written anywhere, only some summary information and quotes from our conversation will be included in the final report without mentioning your name. We will store the collected data without your personally identifiable information and it will be destroyed upon completion of the study.

With your permission, I would like to record our interview and/or take notes during the discussion so as not to miss any information you tell. But you should be aware that it is within your right to ask to turn off the recorder at any time during the interview.

Before we begin, I want to make sure that you have received answers to all questions that interest you. Do you have any other questions regarding your participation in this study?

If you have any questions regarding my study you can ask me or you can contact the Dean of School of Public Health Dr. Varduhi Petrosyan at (060) 61 25 92. If you feel you have been hurt during this interview, or you have not been treated fairly you may contact Varduhi Hayrumyan at (374-60) 612561 at the American University of Armenia Coordinator for Research Ethics.

Do you agree to turn on the recorder?

Please say YES or NO.

If you are ready we can start.

Thank you!

Appendix 7. Oral Consent form for patients with TC (Armenian version)

Հայաստանի ամերիկյան համալսարան

Գիտական էթիկայի թիվ մեկ հանձնաժողով

Իրազեկ համաձայնության ձև հիվանդների համար

Վահանաձև գեղձի ուռուցքով հիվանդների կյանքի փորձառության ուսումնասիրում Հայաստանում. որակական ուսումնասիրություն Հայաստանում

Բարև Ձեզ, իմ անունը Քրիստինա է: Ես սովորում եմ Հայաստանի ամերիկյան համալսարանի Թրփանճեան Հանրային առողջապահության բաժնում՝ մագիստրոսական ծրագրի ավարտական կուրսում:

Որպես իմ թեզային աշխատանքի մաս, ես իրականացնում եմ հետազոտություն, որի նպատակն է պարզել վահանաձև գեղձի խնդիր ունեցող մարդկանց կյանքի փորձառությունը: Դուք հրավիրված եք մասնակցելու այս հետազոտությանը, քանի որ Դուք բնակվում եք Հայաստանում և ունեցել եք վահանաձև գեղձի վիրահատություն , մենք կցանկանայինք իմանալ Ձեր ունեցած փորձառության մասին առողջապահության/բուժ հիմնարկի/բժիշկների հետ: Դուք կլինեք այն 20 մասնակիցներից մեկը, ովքեր պատահականության սկզբունքով ընտրվել են մասնակցելու այս հետազոտությանը, որպեսզի Ձեր օգնությամբ ավելի ընդլայնվի մեր պատկերացումները այն բոլոր դժվարությունների մասին, որին առնչվում է վահանաձև գեղձի խնդիր ունեցող մարդը ախտորոշման և բուժման ընթացքում, Հայաստանում: Այն բժիշկները, ովքեր զբաղվում են վահանագեղձի խնդիր ունեցող մարդկանց բուժմամբ ևս ընդգրկված են այս հետազոտության մեջ՝ ամբողջական պատկերը ունենալու համար:

Ձեր մասնակցությունը սահմանափակվում է միայն ներկայիս հարցազրույցով, որը կտևի մոտավրապես 45-60 րոպե: Հարցազրույցը կիրականացվի տեսազանգի եղանակով:

Ձեզ տրվող հարցերը կվերաբերվեն Ձեր փորձառության տարբեր հատվածներին՝ ախտորոշման և բուժման ընթացքին, այդ ժամանակ առաջացած ցանկացած դժվարություններին, սոցիալական աջակցությանը և այլն:

Ձեր մասնակցությունը այս հետազոտությանը ամբողջությամբ կամավոր է: Դուք կարող եք հրաժարվել պատասխանել ցանկացած հարցի կամ ցանկացած պահի ընդհատել հարցազրույցը: Ձեզ ոչինչ չի սպառնում, եթե Դուք հրաժարվեք մասնակցել այս հարցազրույցին: Ձեր մասնակցությունը այս հարցազրույցին չի հանգեցնի ռիսկի կամ որևէ անմիջական օգուտի, սակայն Ձեր անկեղծ պատասխանները չափազանց կարևոր են մեզ համար և կօգնեն ավելի լավ
հասկանալ վահանագեղձի խնդիր ունեցող հիվանդների կարիքները, այդպիսով նպաստել բժշկական սպասարկման որակի բարելավմանը:

Ձեր կողմից տրամադրված ինֆորմացիան կօգտագործվի միայն հետազոտական նպատակներով: Ձեր անունը կամ այլ կոնտակտային տվյալներ գրված չեն լինի ոչ մի տեղ, միայն որոշ ամփոփ ինֆորմացիա զեկույցի տեսքով և մեջբերումներ մեր զրույցից կներկայացվեն վերջնական զեկույցում` առանց նշելու Ձեր անունը:

Ձեզանից հավաքագրած ինֆորմացիան կպահվի առանց Ձեր անձը բացահայտող տեղեկատվության և կոչնչացվի ծրագրի ավարտից հետո:

Ձեր համաձայնությամբ ես կձայնագրեմ մեր հարցազրույցը և/կամ գրառումներ կվերցնեմ հարցազրույցի ընթացքում` Ձեր կողմից տրամադրված որևէ ինֆորմացիա բաց չթողնելու նպատակով, բայց Ձեր իրավասության սահմաններում է պահանջել անջատել ձայնագրիչը հետազոտության ընթացքում ցանկացած պահի:

Մինչ մենք կսկսենք, ես կցանկանայի համոզվել, որ Դուք ստացել եք Ձեզ հուզող բոլոր հարցերի պատասխանները: Դուք ունեք որևէ այլ հարց կապված այս հետազոտությունում Ձեր մասնակցության վերաբերյալ:

Այս հետազոտության վերաբերյալ հարցեր ունենալու դեպքում կարող եք դիմել ինձ հետ կամ կապ հաստատել Հայաստանի ամերիկյան համալսարանի Հանրային առողջապահության ֆակուլտետի դեկանի ` Վարդուհի Պետրոսյանի հետ հետևյալ հեռախոսահամարով` (060) 61 25 92: Եթե կարծում եք, որ այս հետազոտության շրջանակներում Ձեզ հետ ճիշտ չեմ վարվել կամ որևէ կերպ վիրավորել եմ հարցազրույցին մասնակցության ընթացքում, Դուք կարող եք դիմել Հայաստանի ամերիկյան համալսարանի գիտահետազոտական էթիկայի համակարգող՝ Վարդուհի Հայրումյանին հետևյալ (374-60) 612561 հեռախոսահամարով:

Դուք համաձա՞յն եք, որ ես միացնեմ ձայնագրիչը:
Խնդրում եմ ասել ԱՅՈ կամ ՈՉ:
Եթե Դուք պատրաստ եք մենք կարող ենք սկսել:

Շնորհակալություն:

Appendix 8. Oral Consent form for physicians (English version)

Oral Consent form for physicians (English version)

American University of Armenia

Institutional Review Board #1

Thyroid cancer survivors’ experience in Armenia: a qualitative study

Hello, my name is Kristina. I am a graduate student of the Master of Public Health program of the Turpanjian School Public Health at the American University of Armenia. As part of my thesis work, I am conducting research to explore the life experiences of people with thyroid cancer. You are invited to participate in this study because you live in Armenia and are a physician /surgeon who specializes in thyroid cancer patients and can provide valuable information for our study. You will be one of the 20 participants that are by chance selected to participate in this study in order to expand the understanding of diagnostic and treatment related difficulties among people who have thyroid problem in Armenia. To get the whole picture patients with thyroid cancer are also involved.

Participating in the study only involves this interview that will last for up to 45 minutes-1 hr. The interview will take place via video call.

Questions will cover different aspects of your experience: diagnostic and treatment approaches, processes, any difficulties related to that, etc. Your participation in this study is entirely voluntary. You may refuse to answer any question or stop the interview at any time. There is no penalty if you refuse to participate in this study. Your participation in this study will not lead to risk or any immediate benefit, but your sincere answers are extremely important to us and will help us better understand the needs of patients with thyroid problems, thereby contributing to improved quality of care.

The information provided by you will be used for the study purposes only. Your name or other contact information will not be written anywhere, only some summary information and quotes from our conversation will be included in the final report without mentioning your name.

We will store the collected data without your personally identifiable information and it will be destroyed upon completion of the study.

With your permission, I would like to record our interview and/or take notes during the discussion so as not to miss any information you tell. But you should be aware that it is within your right to ask to turn off the recorder at any time during the interview.

Before we begin, I want to make sure that you have received answers to all questions that interest you. Do you have any other questions regarding your participation in this study?

If you have any questions regarding my study you can ask me or you can contact the Dean of School of Public Health Dr. Varduhi Petrosyan at (060) 61 25 92. If you feel you have been hurt during this interview, or you have not been treated fairly you may contact Varduhi Hayrumyan at (374-60) 612561 at the American University of Armenia Coordinator for Research Ethics.

Do you agree to turn on the recorder?

Please say YES or NO.

If you are ready we can start.

Thank you!

Appendix 9. Oral Consent form for physicians (Armenian version)

Հայաստանի ամերիկյան համալսարան

Գիտական էթիկայի թիվ մեկ հանձնաժողով

Իրազեկ համաձայնության ձև բժիշկների համար

Վահանաձև գեղձի ուռոուցքով հիվանդների կյանքի փորձառության
ուսումնասիրում Հայաստանում. որակական ուսումնասիրություն

Բարև Ձեզ, իմ անունը Քրիստինա է: Ես սովորում եմ Հայաստանի ամերիկյան համալսարանի Թրփանճեան Հանրային առողջապահության բաժնում՝ մագիստրոսական ծրագրի ավարտական կուրսում:
Որպես իմ թեզային աշխատանքի մաս, ես իրականացնում եմ հետազոտություն, որի նպատակն է պարզել վահանաձև գեղձի ուռուցք ունեցող մարդկանց կյանքի փորձառությունը: Դուք հրավիրված եք մասնակցելու այս հետազոտությանը, քանի որ բնակվում եք Հայաստանում և հանդիսանում եք բժիշկ , ով մասնագիտական շփում ունի վանահաձև գեղձի քաղցկեղով հիվանդների հետ և կարող եք տրամադրել արժեքավոր ինֆորմացիա մեր հետազոտության համար:
Դուք կլինեք այն 20 մասնակիցներից մեկը, ովքեր պատահականության սկզբունքով ընտրվել են մասնակցելու այս հետազոտությանը, որպեսզի Ձեր օգնությամբ ավելի ընդլայնվի մեր պատկերացումները այն բոլոր դժվարությունների մասին, որին առնչվում է վահանաձև գեղձի խնդիր ունեցող մարդը ախտորոշման և բուժման ընթացքում, Հայաստանում: Վահանաձև գեղձի ուռուցք ունեցող հիվանդները ևս ընդգրկված են այս հետազոտության մեջ՝ ամբողջական պատկերը ունենալու համար:

Ձեր մասնակցությունը սահամնափակվում է միայն ներկայիս հարցազրույցով, որը կտևի մոտավորապես 45-60 րոպե: Հարցազրույցը կիրականացվի տեսազանգի եղանակով:

Ձեզ տրվող հարցերը կվերաբերվեն Ձեր փորձառության տարբեր հատվածներին՝ ախտորոշման և բուժման մոտեցումներին, ընթացքին, դրանց հետ կապված ցանկացած դժվարություններին և այլն։

Ձեր մասնակցությունը այս հետազոտությանը ամբողջությամբ կամավոր է: Դուք իրավունք ունեք բաց թողնել այն բոլոր հարցերը, որոնց չեք ցանկանա պատասխանել: Դուք նաև իրավունք ունեք ավարտել/ընդհատել հարցազրույցը ցանկացած պահի: Ձեզ ոչինչ չի սպառնում, եթե Դուք հրաժարվեք մասնակցել այս հարցազրույցին: Ձեր մասնակցությունը այս հարցազրույցին չի հանգեցնի ռիսկի կամ որևէ անմիջական օգուտի, սակայն Ձեր անկեղծ պատասխանները չափազանց կարևոր են մեզ համար և կօգնեն ավելի լավ հասկանալ վահանագեղձի խնդիր ունեցող հիվանդների կարիքները, այդպիսով նպաստել բժշկական սպասարկման որակի բարելավմանը:

Ձեր կողմից տրամադրված ինֆորմացիան կպահպանվի գաղտնի և կօգտագործվի միայն հետազոտական նպատակներով՝ ամփոփված զեկույցի տեսքով: Ձեր անունը կամ այլ կոնտակտային տվյալներ գրված չեն լինի ոչ մի տեղ, միայն որոշ մեջբերումներ մեր զրույցից կներկայացվեն վերջնական զեկույցում՝ առանց նշելու Ձեր անունը:

Ձեզանից հավաքագրած ինֆորմացիան կպահվի առանց Ձեր անձը բացահայտող տեղեկատվության և կոչնչացվի ծրագրի ավարտից հետո:

Ձեր համաձայնությամբ ես կձայնագրեմ մեր հարցազրույցը և/կամ գրառումներ կվերցնեմ հարցազրույցի ընթացքում՝ Ձեր կողմից տրամադրված որևէ ինֆորմացիա բաց չթողնելու նպատակով, բայց Ձեր իրավասության սահմաններում է պահանջել անջատել ձայնագրիչը հետազոտության ընթացքում ցանկացած պահի:

Մինչ մենք կսկսենք, ես կցանկանայի համոզվել, որ Դուք ստացել եք Ձեզ հուզող բոլոր հարցերի պատասխանները: Դուք ունեք որևէ այլ հարց կապված այս հետազոտությունում Ձեր մասնակցության վերաբերյալ:

Այս հետազոտության վերաբերյալ հարցեր ունենալու դեպքում կարող եք դիմել ինձ հետ կամ կապ հաստատել Հայաստանի ամերիկյան համալսարանի Հանրային առողջապահության ֆակուլտետի դեկանի ՝ Վարդուհի Պետրոսյանի հետ հետևյալ հեռախոսահամարով՝ (060) 61 25 92: Եթե կարծում եք, որ այս հետազոտության շրջանակներում Ձեզ հետ ճիշտ չեմ վարվել կամ որևէ կերպ վիրավորել եմ հարցազրույցի մասնակցության ընթացքում, Դուք կարող եք դիմել Հայաստանի ամերիկյան համալսարանի գիտահետազոտական էթիկայի համակարգող՝ Վարդուհի Հայրումյանին (374-60) 612561 հեռախոսահամարով:

Դուք համաձա՞յն եք, որ ես միացնեմ ձայնագրիչը:
Խնդրում եմ ասել ԱՅՈ կամ ՈՉ:
Եթե Դուք պատրաստ եք մենք կարող ենք սկսել:
Շնորհակալություն:

Appendix 10. Interviewer manual

Հարցազրուցավարի ուսուցման ծրագիր

Ընդհանուր ծանոթություն ծրագրին

Որպես Հայաստանի ամերիկյան համալսարանի Թրփանճեան Հանրային առողջապահության ֆակուլտետի ավարտական կուրսի ուսանող, ավարտական թեզի շրջանակներում անց է կացվում հետազոտություն, որի նպատակն է ուսումնասիրել Հայաստանում վահանագեղձի ուռուցք ունեցող մարդկանց փորձառությունը մեծահասակների շրջանում (18+)՝ հիվանդների և բժիշկների տեսանկյունից: Այդ նպատակով իրականացվելու է որակական հետազոտություն:

Հետազոտությանը մասնակցելու են այն հիվանդները, ովքեր նախորդող հինգ տարիների ընթացքում տարել են վահանագեղձի ուռուցքի վիրահատություն և գտնվում են հսկողության տակ և այն էնդոկրինոլոգները և էնդոկրին վիրաբույժները, ովքեր հետազոտության պահին պրակտիկ բժիշկներ են և աշխատում են:

Հարցազրուցավարին կտրամադրվի հարցման ուղեցույց: Հարցազրույցի ընթացքում հարցազրուցավարը պետք է կողմնորոշվի ուղեցույցի հարցերով, բայց ազատ է հարցերի հերթականությունը խառնելու հարցում: Անհրաժեշտության դեպքում մի հարցը կարող է տալ մի քանի անգամ, լիարժեք անկողմնապահ պատասխան ստանալու համար:

Հարցազրույցի տևողությունը միջինում 45-60 րոպե է:

Մասնակիցների հետ (հիվանդներ և բժիշկներ) հարցազրույցը կիրականացվի տեսազանգի միջոցով (Face Time, Messenger, Skype), հաշվի առնելով հետազոտության ընթացքում Հայաստանում առկա արտակարգ իրավիճակը կապված COVID-19 համավարակի հետ:

Հարցազրուցավարի ուսուցումը

Ծրագրում ներգրավված հարցազրուցավարը պետք է մասնակցի երկժամյա ուսուցմանը, որը ևս կանցկացվի տեսազանգի միջոցով: Ուսուցման ընթացքում նա կծանոթանա ծրագրին, որակական հետազոտություն անցկացնելու գործելակերպին, էթիկական նկատառումներին, իր պարտականություններին, կներկայացվի հարցազրույցի անցկացման ընթացակարգը : Հարցազրուցավարը կծանոթանա հարցման ուղեցույցին և հնարավորություն կունենա կիրառել/փորձել ստացած գիտելիքը ուսանող հարցազրուցավարի հետ՝ ձեռք բերելու համար անհրաժեշտ հմտություններ:

Հարցազրուցավարների պարտականությունները և վարման ուղեցույցը

Հարցազրուցավարները պետք է աշխատեն զուգահեռ: Հետազոտության համար պատասխանատու ուսանողը մյուս հարցազրուցավարին կտրամադրի ընտրված մասնակիցների համապատասխան տվյալները ՝ մասնակիցների կոնտակտային տվյալները և տեսազանգի կապի եղանակը:
Ցանկացած հարցի դեպքում հարցազրուցավարը պետք է կապ հաստատի հետազոտության համար պատասխանատու ուսանողի հետ և չկայացնի ինքնակամ որոշումներ:
Հարցազրույցը անցկացվելու է մասնակցին հարմար ժամանակ:
Յուրաքանչյուր հարցազրուցավար ունենալու է իրեն համապատասխան ID կոդը, որն անհրաժեշտ է լրացնել հարցաթերթիկի վրա մինչև հարցազրույցը:

Հարցազրուցավարը պետք է

- Ներկայանա պատշաճ ձևով՝ հստակ ներկայացնելով հետազոտության նպատակը և ընթացակարգը, հատուկ մատնանշելով մասնակցի բոլոր իրավունքները
- Լինի բարեհամբույր և հարգալից մասնակցի հանդեպ, ամենակսզբից կարողանա հաստատել լավ կոնտակտ մասնակցի հետ՝ փորձելով ստանալ համաձայնություն հարազրույցը ձայնագրելու համար

- Ձայնագրվելու առաջարկի մերժման դեպքում հարցազրուցավարը պետք է պատրաստ լինի նշումներ անելու հարցազրույցի ընթացքում՝ միաժամանակ չլարվելով և չշեղելով մասնակցի ուշադրությունը
- Իր վերաբերմունքով ցուցադրի մասնակցի կարևորությունը այդ հարցազրույցին մասնակցելու համար
- Լինի համբերատար և անհրաժեշտության դեպքում տրամադրի հավելյալ ժամանակ, եթե մասնակիցը կարիք կունենա
- Հարցազրույցի ընթացքում լինի չեզոք, առանց իր սուբյեկտիվ էմոցիաները և կարծիքը արտահայտելու,
- Չմիջամտի մասնակցի պատասխանին իր կարծիքով, չշարունակի մասնակցի կիսատ թողած միտքը ինքնուրույն, այլ հուշող հարցերի միջոցով շարունակի և փորձի ավարտին հասցնել մասնակցի պատասխանը
- Հարցազրույցի ընթացքում որևէ դժվարությունների և անհասկանալի իրավիճակների հետ առնչվելու պարագայում անմիջապես դիմի ուսանող հարցազրուցավարին և հետևի առաջարկված ցուցումներին
- Մասնակցի կողմից հարցազրույցը կեսից դադարեցվելու դեպքում փորձի պարզել պատճառը, այնուհետև ևս մեկ անգամ հայտնի շնորհակալություն մասնակցության համար՝ այդպիսով ավարտին հասցնելով հարցազրույցը:
- Հարցազրույցի վերջում հայտնի շնորհակալություն և լրացնի դեմոգրաֆիկ հարցերի մասը

Appendix 11. Journal form (English version)

Interviewer ID (student investigator) _ 01

Interviewer ID (if hired interviewer conducted the interview) – 02

Hello! My name is Kristina. I am an endocrinologist and a graduate student of the Master of Turpanjian School of Public Health program at the American University of Armenia.

Thank you for your interest to participate in our study through sharing your experience during an interview.

As part of my thesis work, my department and I are conducting a study to understand the life experience of people with thyroid cancer and what are the challenges they faced during their diagnosis and treatment process in Yerevan, Armenia

I would like to conduct an interview on your preferred date at your convenience time, taking into consideration the current situation it will be held via video call.

What would be your suggestions and preferred type of video call?

Thank you for your time, I will make a reminder call a day prior to interview.

(If you don't mind my co-worker Gayane will conduct an interview with you)

Interviewer ID (student investigator) _ 01
Interviewer ID (if hired interviewer conducted the interview) _ 02

ID	Refuse to participate	Date of contact --/--/----	Date of interview --/--/----	Completion status (If agreed)	Phone number/ Name/video call
01.	☐ Busy ☐ Doesn’t want ☐ Other			☐ Complete ☐ Incomplete	
02.	☐ Busy ☐ Doesn’t want ☐ Other			☐ Complete ☐ Incomplete	
03.	☐ Busy ☐ Doesn’t want ☐ Other			☐ Complete ☐ Incomplete	
04.	☐ Busy ☐ Doesn’t want ☐ Other			☐ Complete ☐ Incomplete	
05.	☐ Busy ☐ Doesn’t want ☐ Other			☐ Complete ☐ Incomplete	
06.	☐ Busy ☐ Doesn’t want ☐ Other			☐ Complete ☐ Incomplete	
07.	☐ Busy ☐ Doesn’t want ☐ Other			☐ Complete ☐ Incomplete	
08.	☐ Busy ☐ Doesn’t want ☐ Other			☐ Complete ☐ Incomplete	
09.	☐ Busy ☐ Doesn’t want ☐ Other			☐ Complete ☐ Incomplete	
10.	☐ Busy ☐ Doesn’t want ☐ Other			☐ Complete ☐ Incomplete	

Appendix 12. Journal form (Armenian version)

Հետազոտողի ID (Ուսանող հետազոտող) _ 01

Հետազոտողի ID (Եթե օգնական հետազոտողն է իրականացրել հարցազրույցը) _ 02

Բարև Ձեզ! Իմ անունը Քրիստինա է։ Ես Էնդոկրինոլոգ եմ և Հայաստանի Ամերիկյան համալսարանի հանրային առողջապահության ֆակուլտետի մագիստրոսական ծրագրի ավարտական կուրսի ուսանող եմ։

Շնորհակալ եմ հարցազրույցին մասնակցելու Ձեր հետաքրքրության համար։

Որպես իմ թեզային աշխատանքի մաս, ես իրականացնում եմ հետազոտություն, որի նպատակն է պարզել վահանաձև գեղձի խնդիր ունեցող մարդկանց կյանքի փորձառությունը և այն մարտահրավերները, որոնց բախվել են նրանք ախտորոշման և բուժման ընթացքում։

Ես կցանկանայի հարցազրույցը իրականացնել Ձեր նախընտրած օրը և ժամին։ Հաշվի առնելով ստեղծված իրավիճակը և ելնելով Ձեր անվտանգության նկատառումներից՝ այն կիրականացվի տեսազանգի միջոցով։

Ի՞նչ կառաջարկեք։ Ունե՞ք տեսազանգի որևէ նախընտրած տարբերակ։

Շնորհակալ եմ Ձեր ժամանակի համար, հարցազրույցից մեկ օր առաջ ես հիշեցման զանգ կտամ։

(Եթե դուք դեմ չեք, ապա իմ օգնական Գայանեն կանցկացնի հարցազրույցը Ձեզ հետ)։

Հետազոտողի ID (Ուսանող հետազոտող) _ 01

Հետազոտողի ID (Եթե օգնական հետազոտողն է իրականացրել հարցազրույցը) _ 02

ID	Հրաժարվում է մասնակցել	Կոնտակտի օր --/--/----	Հարցազրույցի օր --/--/----	Ավարտուն լինելու կարգավիճակ	Հեռախոս./Անուն/Տեսազանգ
01.	☐ Զբաղված է ☐ Չի ցանկանում ☐ Այլ			☐ Լիարժեք ☐ Թերի	
02.	☐ Զբաղված է ☐ Չի ցանկանում ☐ Այլ			☐ Լիարժեք ☐ Թերի	
03.	☐ Զբաղված է ☐ Չի ցանկանում ☐ Այլ			☐ Լիարժեք ☐ Թերի	
04.	☐ Զբաղված է ☐ Չի ցանկանում ☐ Այլ			☐ Լիարժեք ☐ Թերի	
05.	☐ Զբաղված է ☐ Չի ցանկանում ☐ Այլ			☐ Լիարժեք ☐ Թերի	
06.	☐ Զբաղված է ☐ Չի ցանկանում ☐ Այլ			☐ Լիարժեք ☐ Թերի	
07.	☐ Զբաղված է ☐ Չի ցանկանում ☐ Այլ			☐ Լիարժեք ☐ Թերի	
08.	☐ Զբաղված է ☐ Չի ցանկանում ☐ Այլ			☐ Լիարժեք ☐ Թերի	
09.	☐ Զբաղված է ☐ Չի ցանկանում ☐ Այլ			☐ Լիարժեք ☐ Թերի	
10.	☐ Զբաղված է ☐ Չի ցանկանում ☐ Այլ			☐ Լիարժեք ☐ Թերի	