Co-funded by the European Union

TÜRKİYE ULUSAL AJANSI
TURKISH NATIONAL AGENCY

REMEM Project Cross Cultural Model Report

REMEM Project

A CROSS CULTURAL ANALYSIS of FACTORS INFLUENCING CARETAKER BEHAVIOR and ATTITUDE REPORT

Gratiela Dana BOCA
Technical University of Cluj-Napoca
Romania
Arzum ISITAN
Pamukkale University
Turkiye

Project Acronym:	REMEM
Project full title:	Unuttuysan Tıkla / Click me, if you forgot
Project No.:	2019-1-TR01-KA204-074782
Funding Scheme:	KA204- Cooperation Partnerships in Adult Education
Coordinator:	Pamukkale University
Task Leader:	Technical University of Cluj Napoca
Last version date:	30.11.2022
Status:	Final
Dissemination Level:	Public

Disclaimer

"Funded by the Erasmus+ Programme of the European Union. However, European Commission and Turkish National Agency cannot be held responsible for any use which may be made of the information contained therein"

Reproduction is authorized provided the source is acknowledged:

Boca, GB, Isitan, A (2022). "REMEM Project Cross Cultural Analysis of Factors Influencing Caretaker Behavior and Attitude Report". Unuttuysan Tıkla / Click me, if you forgot Project. www.remem.eu

PAMUKKALE ÜNİVERSİTESİ 1992 DENİZLİ · DİDER İNOVASYON DERNEĞİ DENİZLİ · KIRKLARELİ ÜNİVERSİTESİ 2007 · cosvitec Università & Impresa · TECHNICAL UNIVERSITY OF CLUJ-NAPOCA ROMANIA

"Funded by the Erasmus+ Program of the European Union. However, European Commission and Turkish National Agency cannot be held responsible for any use which may be made of the information contained therein"

Table of Contents

1. REMEM Project Results- Final Report 3

1.1. Sample and Measurement Tool 4

1.2. Purpose of the Study 5

2. Results 7

4. A CROSS CULTURAL MODEL PROPOSAL 16

5. INTERACTION BETWEEN VARIABLES 19

6. CORRELATIONS BETWEEN ITEMS 25

7. CONVENTIONAL CONSUMER CLUSTER 26

8.CONCLUSIONS 28

10.REFERENCES 29

"Funded by the Erasmus+ Program of the European Union. However, European Commission and Turkish National Agency cannot be held responsible for any use which may be made of the information contained therein"

1. REMEM Project Results- Final Report

The project proposes an innovative methodology based on the creative use of digitalization and its tools in the context of caring for people with Alzheimer's disease. This project has as final product the application for mobile telephone as well as the questionnaire that was piloted in 3 countries: Romania, Italy and Turkiye. A set of tools is also proposed to improve communication between people and people with Alzheimer's, using role play and the art of storytelling.

Within a transnational partnership formed by organizations from Romania, Italy and Turkiye, the project also aims to develop radiographs of public policies in order to achieve favorable care for patients with dementia. In order to improve the skills of Alzheimer's care professionals and the well-being of people with Alzheimer's and at the same time provide support to families to meet the challenges posed by their behavioral symptoms, the project will have a positive impact on regarding the work of professionals in this field, the quality of life of people with Alzheimer's disease, as well as the difficulties faced by relatives, family members.

In recent years, international research has focused on families caring for the elderly with dementia (Zarit et al. 1985, Crespo (2005); Aneshensel et al. 1995; 2000). The role identity theory of Montgomery and Kosloski has also been fundamental to my own research, as it makes the often-dramatic role changes in the caregiver family measurable (Montgomery-Kosloski 2013).

When evaluating the results of the examination, we can identify different factors of housing in residential housing: caring family members, as a result of dementia, face a number of behavioral problems and ongoing losses; they have no experience or support, while they face daily helplessness and often loss of hope.

Technology has enormous potential to benefit the lives of the elderly, enabling them to live independently and providing support in the implementation of preventive health care, health education.

During the project, improvements in communication skills, social functionality and patient autonomy were observed. This project had the ability to facilitate the therapeutic relationship between patients and the caregiver, to help patients to adapt, to remember and to better understand their own life. In Table 1, the questionnaire structure and factors influencing care behavior factors used in the studies carried out within the scope of the project can be seen.

"Funded by the Erasmus+ Program of the European Union. However, European Commission and Turkish National Agency cannot be held responsible for any use which may be made of the information contained therein"

Table 1. Questionnaire structure and factors influencing care behavior factors

Question	Item	Factor
Country	I1	Patient
Patience gender	I4	
Patience age	I2	
Relative gender	I3	Care
Relative age	I5	
Relative grade with patient	I6	
For how long time you take care of patient	I7	
Do you know which are the patient problems in every stage of disease	I8	Knowledge
Do you have enough knowledge's to be able to pass the confusion	I9	
Do you have any knowledges to overcome patience behavioral	I10	
Do you have enough information about the medicine for your patient	I11	
Do you know what entertaining and mental activities you can do with your patient	I12	
Do you know about the arrangement of the house for security	I13	
Do you know how to communicate with your patient	I14	
Do you have knowledges to deal with hygienic patient problems	I15	
Do you have the knowledge to deal with your Alzheimer's patient's eating problem	I16	
Do you know what to do with the emergency physical illnesses of your Alzheimer's patient	I17	
Do you have information about which physical exercises you can do for your Alzheimer's patient	I18	Needs
Do you have information on ways to deal with Alzheimer's patients' disappearance problems?	I19	
Do you know what you can do legally regarding your Alzheimer's patient	I20	
Do you have information about care of bedridden level Alzheimer's patient	I21	
Do you refer to any resources to be informed about the problems you have with your patient and about the disease? If you are, please mark which of the following sources you are applying for.	I22	
Have you received any help with your emotional and social problems as a patient relative? If you have, which of the following units did you apply for	I23	Support

1.1. Sample and Measurement Tool

To determine the dimensions of care and patient behavior and to identify implied patient needs, the care person culture between different countries, and the related knowledge, explanatory factor analysis (EFA) was applied to the data set. Using independent sample *t*-tests, the hypotheses were tested using SPSS statistical analyses

"Funded by the Erasmus+ Program of the European Union. However, European Commission and Turkish National Agency cannot be held responsible for any use which may be made of the information contained therein"

software. The Lisrel 8.7 program was used to establish the connection and correlation between items.

1.2. Purpose of the Study

The research model from Figure 1 is based on the research objectives and hypothesis. The model shows the direct and indirect relationships between the research variables (Needs, Culture, and Knowledge); additionally, demographic variables (age, gender, country) were included.

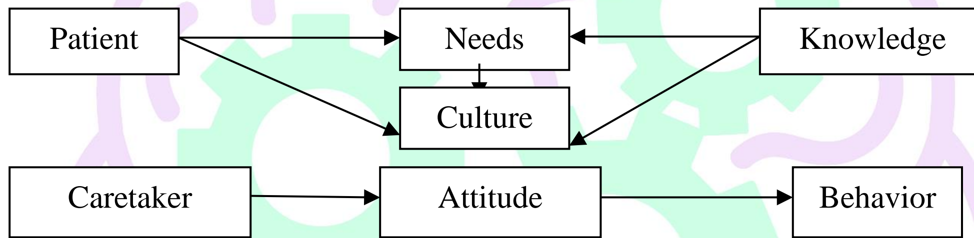

Figure1. Research model

The survey was structure in following parts taking in consideration the patience and also the care persons and the interconnection which it is establish in the patience - care persons to identify the attitude and the behavior between the needs and knowledges.

In this study, the following four factors that influence consumer behavior were taken into consideration:

1. Patient characteristics (A-age, G-gender, C-country);
2. Care characteristics (age, gender, period of carrying, type of relative connection);
3. Culture—care and patient culture if it is an influence between countries;
4. Knowledgeable care, direct participation (relatives, family), identify and selection of information's needs in care process (eating, protection, communication, security, etc.);
5. Needs—frequency questions regarding the care of patient);
6. Support who gives support and help care persons in their activities.

"Funded by the Erasmus+ Program of the European Union. However, European Commission and Turkish National Agency cannot be held responsible for any use which may be made of the information contained therein"

The hypotheses tested on the attitude of consumers in the present study are:

Hypothesis 1. Patient preferences have a significant effect on their attitudes towards their care period.
Hypothesis 2. Patient preferences have a significant effect on their attitudes towards their diet needs.
Hypothesis 3. The preference of patient has a significant effect on care attitudes towards knowledge.
Hypothesis 4. The preference of patient concerning their needs has a significant effect on care attitudes.
Hypothesis 5. Attitudes of care person and their culture have a significant effect on their behavior.
Hypothesis 6. Attitudes of care person towards patient needs have a significant effect on their behavior.
Hypothesis 7. Attitudes of care person towards knowledge have a significant effect on their behavior.

The total alpha value of scale was calculated as 0.91, which is statistically one of the indicators that shows that the reliability of the scale is enough. After reliability analysis, exploratory factor analysis (EFA) was applied, and the structural equation model (Table 2) was developed after removing items that had factor loadings lower than 0.10.

Table 2. Goodness of fit indices for the structural model

Criteria	**Perfect Fitness**	**Acceptable Fitness**	**Model**
RMSEA	0 < RMSEA < 0.05	0.05 ≤ RMSEA ≤ 0.10	0.064
NFI	0.95 ≤ NFI ≤ 1	0.90 ≤ NFI ≤ 0.95	0.95
NNFI	0.97 ≤ NNFI ≤ 1	0.95 ≤ NNFI ≤ 0.97	0.99
CFI	0.97 ≤ CFI ≤ 1	0.95 ≤ CFI ≤ 0.97	0.99
GFI	0.95 ≤ GFI ≤ 1	0.90 ≤ GFI ≤ 0.95	0.91
AGFI	0.90 ≤ AGFI ≤ 1	0.85 ≤ AGFI ≤ 0.90	0.88

Source: Schermelleh-Engel and Moosbrugger. RMSEA: root mean square error of approximation; NFI: normed fit index; NNFI: non-normed fit index; CFI: comparative fit index; GFI: goodness of fit index; AGFI: adjusted goodness of fit index.

In order to be sure that the respondents come only from each country, the respondents were chosen at random in different points of hospitals and care places in same period and using same survey. The data were collected through a face-to-face survey based on structured questionnaires. For that reason, a total of 173 persons who

"Funded by the Erasmus+ Program of the European Union. However, European Commission and Turkish National Agency cannot be held responsible for any use which may be made of the information contained therein"

constituted the target group, were enrolled and gave feedback regarding behavior, attitude, and preferences related to patient and care. This study used the explanatory survey method to establish several hypothetical relationships between respondents' characteristics and patient disease.

2. Results

The target group was like in Table 3. 102 persons from Romania, 51 persons from Turkiye and 20 persons from Italy.

Table 3. Respondents from each country

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Romania	102	59,0	59,0	59,0
	Turkiye	51	29,5	29,5	88,4
	Italy	20	11,6	11,6	100,0
	Total	173	100,0	100,0	

a. Identify patient characteristics

The first part investigated the sociodemographic characteristics of the patient using four questions (gender, age). The study allowed the analysis of the interaction and association between patient and care person. If we take in consideration the results, we can make an analysis taking in consideration the patient. For patients from all countries, we obtain that a percent of 58.4% are female and close a percent of 41.6 % is male Table 4.

Table 4. Patient gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	72	41,6	41,6	41,6
	Female	101	58,4	58,4	100,0
	Total	173	100,0	100,0	

Regarding the patience age the biggest value of 45.1 % was obtain for patients age more than 75 age old, a percent of 41 % for patient between 65-74 age and the lowest value for patients age between 55-65 age old. As we can observe from Table 5 the predominant patients age from the three countries are for elderly person with more than 75 age.

"Funded by the Erasmus+ Program of the European Union. However, European Commission and Turkish National Agency cannot be held responsible for any use which may be made of the information contained therein"

Table 5. Patient age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	55-65	24	13,9	13,9	13,9
	65-74	71	41,0	41,0	54,9
	75 more	78	45,1	45,1	100,0
	Total	173	100,0	100,0	

b. Identify caretaker characteristics

The analyses of results show us that a percent of 55.5% are female and 44.5 % are male, so the care gender it is equal the empathy of the patience it is similar in all families in all coutries.

Table 6. Relative gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	77	44,5	44,5	44,5
	Female	96	55,5	55,5	100,0
	Total	173	100,0	100,0	

The relative patience is wife or husband in 31,2 % but the biggest value was obtained for daughter or sun in a 52% (Table7) so family it is important, as a value share in all countries.

Table 7. Relative grade with patient

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	wife or husband	54	31,2	31,2	31,2
	daughter or sun	90	52,0	52,0	83,2
	relative	29	16,8	16,8	100,0
	Total	173	100,0	100,0	

A low percent of 29% show that other relative nephew or uncle/ aunt are involve in the care process

If we look, we notice that again the adults in the family are the ones who get involved in the process of caring for their loved ones in all countries. In the first phase, they are trying to find solutions within the family for protection and care of patients.

"Funded by the Erasmus+ Program of the European Union. However, European Commission and Turkish National Agency cannot be held responsible for any use which may be made of the information contained therein"

Table 8. Relative age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	20-39	42	24,3	24,3	24,3
	40-64	76	43,9	43,9	68,2
	65-74	53	30,6	30,6	98,8
	75 more	2	1,2	1,2	100,0
	Total	173	100,0	100,0	

Because the target from Romania and Turkiye was the biggest, we can mention that in those countries the traditional culture regarding the family and the protection of elderly family members remains same and it is continuing yet as a traditional culture from generations.

c. Caretaker Knowledges

Studies have shown that more than half of the families of patients diagnosed with dementia develop a burnout syndrome, many of them suffering from anxiety, depression, and an increased incidence of somatic diseases.

The lack of qualified staff for the home care of these patients amplifies the burnout syndrome of the family, which is constrained by these deficiencies of the welfare system in restricting itself from daily recreational activities, with the emergence of poor interpersonal relationships.

The stress they feel leads to the appearance of multiple acute pathologies, some of which endanger their lives.

Decision makers:

Working with people living with dementia puts great demands on the family who care for them and who go along with giving up their own lifestyle. Early caregivers often lose hope in life and become uncertain in the care process in the absence of a supportive background.

A special part of survey in our case study was the caretaker knowledges of peoples involved in this kind of activity.

The results from Table 9, shows that in a percent of 45.1% the caretakers were involved from 1-5 months. a 37 % percent of caretakers between 6-10 months and a low value of 17.9% percent was obtain for family caretaken for more than 11 months.

"Funded by the Erasmus+ Program of the European Union. However, European Commission and Turkish National Agency cannot be held responsible for any use which may be made of the information contained therein"

Table 9. For how long time you take care of patient

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1-5 months	78	45,1	45,1	45,1
	6-10 months	64	37,0	37,0	82,1
	11 and higher	31	17,9	17,9	100,0
	Total	173	100,0	100,0	

The survey tries to identify the caretaker knowledges, and which are their needs in care process indifferent stages as below we will mention the results obtain after the analyses of data. Patience behavior give to caretaker person a new motivation to have and obtain knowledges about the confusion attitude of patience and how the care person can handle the situation.

We can mention that culture it is not an impediment, in fact for everybody in a 32.9 % percent of care persons they don't know what to do and they don't have enough knowledges to pass the patient confusion situation (Table 10).

Table 10. The knowledge needs of care person in relation with patient

Items	**No %**	**Low %**	**Medium %**	**Higher %**
Do you know which are the patient problems in every stage of disease	22.0	36.4	27.2	14.5
Do you have enough knowledges to be able to pass the confusion	32.9	28.9	28.3	9.8
Do you have any knowledges to overcome patience behavioral	39.9	27.2	18.5	14.5
Do you have enough information about the medicine for your patient	4.6	19.7	21.4	17.3

9.8% percent of caretaker has a high level of knowledges how to manage the situation. For Romania, Turkiye and Italy the caretakers' knowledges about the patient problems are low in a 36.4% percent and in a percent of 27.2% medium, in conclusion the relatives don't have enough knowledges indifferent stages before and in care process.

Only a 14.5% from respondents know how to resolve the patient problems in every stage of disease. The results show that an equal of 28.9 % percent of caretaker have a low level of knowledges about the care of patient and a percent of 28.3% of care person have medium information in an almost equal percent.

"Funded by the Erasmus+ Program of the European Union. However, European Commission and Turkish National Agency cannot be held responsible for any use which may be made of the information contained therein"

d. Quality of life

The concept of quality of life itself as well as quality of life in relation to health is very important in relation to the growth of the elderly population and life expectancy.

Well-being must be maintained both physically and psychologically and socially. In our study case the biggest value was obtain for low knowledges 35.8% percent of respondents as caretaker about how to secure the house, adapt and establish a good environment for patient needs (Table 11).

Only a 15% percent of respondents confirm that they have knowledges about the arrangements of house from security point of view.

Table 11. Do you know about the arrangement of the house for security

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	62	**35,8**	**35,8**	35,8
	low	52	30,1	30,1	65,9
	medium	33	19,1	19,1	85,0
	higher	26	15,0	15,0	100,0
	Total	173	100,0	100,0	

The other important knowledge for caretaker it is communication and how to adapt the communication in function with the patient needs. For all 173 respondents from Romania, Turkiye, and Italy the communication represents for caretaker a weak a point for 40.5 % of respondents without any knowledge about how to communicate with the patient (Table 12). Only 16.2 % percent of caretaker have knowledge about the importance of communication care –patient.

Table 12. Do you know how to communicate with your patient

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	70	40,5	40,5	40,5
	low	39	22,5	22,5	63,0
	medium	36	20,8	20,8	83,8
	higher	28	16,2	16,2	100,0
	Total	173	100,0	100,0	

Also, a big problem identifies for patience it is represented by personal hygiene and other circumstances (Table 13). A 39.9 % percent of respondents do not have enough knowledges about the hygienic patient problems and only 17.9 % have enough information.

“Funded by the Erasmus+ Program of the European Union. However, European Commission and Turkish National Agency cannot be held responsible for any use which may be made of the information contained therein”

Table 13. Do you have knowledges to deal with hygienic patient problems

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	36	20,8	20,8	20,8
	low	69	39,9	39,9	60,7
	medium	37	21,4	21,4	82,1
	higher	31	17,9	17,9	100,0
	Total	173	100,0	100,0	

The culture has no influence in the caretaker knowledge because a 32.4% percent of respondents confirm that they have low knowledges about the eating and food patient problem like in Table 14.

Table 14. Do you have the knowledge to deal with Alzheimer's patient's eating problems

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	48	27,7	27,7	27,7
	low	56	32,4	32,4	60,1
	medium	37	21,4	21,4	81,5
	higher	32	18,5	18,5	100,0
	Total	173	100,0	100,0	

Another point taken consideration for quality-of-life patient was the eating problems because it is very well now that the food can has beneficial influence in the patient life

Also, regarding the knowledge about the emergency situation of patient (Table 15) a 37.6% percent of respondents confirm that they do not have any knowledge regarding that kind of situation, here we can take in consideration that majority of the care person from family are recently involve in care of patient and they did not face with that type of situation, or the disease stage is in the early stage.

Table 15. Do you know what to do with the emergency physical illnesses of your Alzheimer's patient

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	65	37,6	37,6	37,6
	low	53	30,6	30,6	68,2
	medium	38	22,0	22,0	90,2
	higher	17	9,8	9,8	100,0
	Total	173	100,0	100,0	

"Funded by the Erasmus+ Program of the European Union. However, European Commission and Turkish National Agency cannot be held responsible for any use which may be made of the information contained therein"

Quality of life for patient it is also beneficial having information about physical exercises for majority of respondents in a 39.3 % percent they don't have any information or enough information and 28.9% percent of respondents have a low information (Table 16).

Table 16. Do you have information about which physical exercises you can do for your Alzheimer's patient

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	68	39,3	39,3	39,3
	low	50	28,9	28,9	68,2
	medium	35	20,2	20,2	88,4
	higher	20	11,6	11,6	100,0
	Total	173	100,0	100,0	

In direct connection with disease problem, the caretaker must be informed and have knowledges about some episode of disappearance of patient like in Table 17, we can observe that a 405% percent of respondents don't have any kind of information about possible events in patient behavior.

Table 17. Do you have information on ways to deal with Alzheimer's patients' disappearance problems

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	70	40,5	40,5	40,5
	low	47	27,2	27,2	67,6
	medium	37	21,4	21,4	89,0
	higher	19	11,0	11,0	100,0
	Total	173	100,0	100,0	

More comprehensive health care it is as important as when one person is diagnosed with disease not to neglect others health issues as it can make the symptoms to become more pronounced. For this reason, it is important also ophthalmic care, hearing loss, hygiene and oral care, as well as many other factors that can help one person to have a complete and healthy life.

The situation for patient family and as a caretaker it is difficult in that circumstances it is necessary to know the legality regarding the Alzheimer's patient, family been espoused in different situation depending on patient stage of disease (Table 18).

"Funded by the Erasmus+ Program of the European Union. However, European Commission and Turkish National Agency cannot be held responsible for any use which may be made of the information contained therein"

Table 18. Do you know what you can do legally regarding your Alzheimer's patient

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	98	56,7	56,7	57,2
	low	38	22,0	22,0	78,6
	medium	21	12,1	12,1	90,8
	higher	16	9,2	9,2	100,0
	Total	173	100,0	100,0	

The research confirms that the relatives from each country are not prepare for that kind of situation and the quality of patient life is a necessity for both actors' patient and care person. Another weak point of family members in a 35.3% percent are the lack of information about bedridden (Table 19).

Table 19. Do you have information about care of bedridden level Alzheimer's patient

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	61	35,3	35,3	35,3
	low	66	38,2	38,2	73,4
	medium	34	19,7	19,7	93,1
	higher	12	6,9	6,9	100,0
	Total	173	100,0	100,0	

Only a percent of 6.9% of respondents have enough information regarding the bedridden patient because of their long term of carrying.

e. Source of information about the patient problem

e.1. Request assistance

There are many types of support available for people with different disease in our case with Alzheimer, both from the state sector and from the community sector and volunteering. These may include support groups, support groups view of forming friends, legal representation, and many other forms assistance in reducing social isolation. No one should go this route alone, and social interaction is vital for maintaining a healthy and good life for those affected by disease. It is also very important to be as informed as possible to the evolution of disease and there is a lot of quality information available to help caretaker or relatives with that. They can be found online in printed or talking with family doctor or medical staff sanitary.

PAMUKKALE ÜNİVERSİTESİ 1992 DENİZLİ · DERNEĞİ İNOVASYON DİDER DENİZLİ · KIRKLARELİ ÜNİVERSİTESİ 2007 · cosvitec Università & Impresa · TECHNICAL UNIVERSITY OF CLUJ-NAPOCA ROMANIA
"Funded by the Erasmus+ Program of the European Union. However, European Commission and Turkish National Agency cannot be held responsible for any use which may be made of the information contained therein"

e.2. Specialize Services Guides

These are professionals from every Health and Social Work Trust (Health and Social Care Trust) whose role is to provide information and assistance to people with dementia. These they will be close to the person from the beginning of the course and will provide assistance throughout the experience. They will offer support is in person, is on the phone and will represent a person vital link for all people with dementia from a certain region.

e.3. Community and volunteer organizations

These organizations can provide, to a large extent, assistance to all persons affected by dementia. They can provide different information ways and can also conduct briefings. These offers some excellent support services for people with dementia and their caregivers and can be a powerful voice for all those affected by disease in that region.

A percent of 43.4% of family patient members obtain the information for different situation from internet, another source it is represented for 30.1% of respondents by the psychologist and psychological advice of medical personal involved in patient care (Table 20).

Table 20. Do you prefer any resources to be informed about the problems you have?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Internet	75	43,4	43,4	43,4
	Book	16	9,2	9,2	52,6
	Specialist (Neurologist, Psychologist and Psychological Consultant)	52	30,1	30,1	82,7
	Other	30	17,3	17,3	100,0
	Total	173	100,0	100,0	

A percent of 17.3% of respondents consider that municipalities psychological counselling center give them a helping hand like in Table 21.

"Funded by the Erasmus+ Program of the European Union. However, European Commission and Turkish National Agency cannot be held responsible for any use which may be made of the information contained therein"

Table 21. Have you received any help with your emotional and social problems?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Municipalities Psychological Counseling Centers	30	17,3	17,3	17,3
	Units of the Ministry of Family, Labor, and Social Services	16	9,2	9,2	26,6
	Alzheimer's Association Branches	45	26,0	26,0	52,6
	Private Psychological Counseling Centers	21	12,1	12,1	64,7
	Others	61	35,3	35,3	100,0
	Total	173	100,0	100,0	

In our study people need to receive emotional and also social help to know how to handle patient problems, a percent of 26% of family's members are open to obtain help from specialized institution and association and counseling them. It is also very important to be as informed as possible to the evolution of dementia and there is a lot of quality information available to help you with that. They can be found online in printed or talking to your family doctor or medical staff sanitary.

4. A CROSS CULTURAL MODEL PROPOSAL

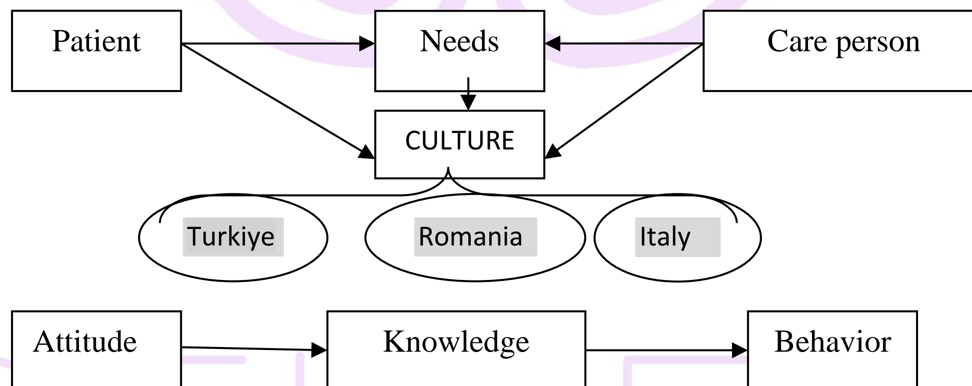

Figure 2. A Cross Culture Model research

From Table 22, the analysis present that in Romania a value of 47% percent of care person are wife or husband of patient in comparison with Turkiye where in a precent of 63 % are daughter or son like in Italy a percent of 80%. We can mention as a conclusion that family members are involved in care process and relatives are in a low value or not at all involved in care process.

"Funded by the Erasmus+ Program of the European Union. However, European Commission and Turkish National Agency cannot be held responsible for any use which may be made of the information contained therein"

Another difference between countries it is that Romanians care person are involved in care process for a between 6-10 months in comparison with Turkiye and Italy when family members are involved in patient care between 1-5 months.

Table 22. Relative relation with patient

		Relative grade with patient			Total
		wife or husband	daughter or sun	relative	
Country	Romania	48	42	12	102
	Turkiye	2	32	17	51
	Italy	4	16	0	20
Total		54	90	29	173
		For how long time you take care of patient			Total
		1-5 months	6-10 months	11 and higher	
Country	Romania	37	42	23	102
	Turkiye	28	17	6	51
	Italy	13	5	2	20
Total		78	64	31	173

Turkiye and Italy obtain a biggest value for the level of knowledges of patient problems in comparison with Romania who obtain the lowest value of knowledges regarding the patient problems in function of disease stage.

Table 24. Do you know which are the patient problems in every stage of disease

		Do you know which are the patient problems in every stage of disease				Total
		no	low	medium	high	
Country	Romania	36	48	16	2	102
	Turkiye	2	9	21	19	51
	Italy	0	6	10	4	20
Total		38	63	47	25	173

Romanians care person in a percent of 54.11 % don't have any knowledges about the confusion symptoms of patients and in a percent of 38.4% for Turkiye and the biggest value of knowledge was obtained for medium knowledges for Turkiye and Italy (Table 24).

"Funded by the Erasmus+ Program of the European Union. However, European Commission and Turkish National Agency cannot be held responsible for any use which may be made of the information contained therein"

Table 24. Do you have enough knowledges to be able to pass the confusion

		Do you have enough knowledges to be able to pass the confusion				Total
		no	low	medium	higher	
Country	Romania	53	34	13	2	102
	Turkiye	4	12	20	15	51
	Italy	0	4	16	0	20
Total		57	50	49	17	173

For Romanian caretaker we can mention that the analysis show that they don't have enough knowledge or information regarding the quality of life of patient, here we can mention that a percent of 60.78% of care taker don't have any knowledge about the patient behavior (Table 25), a 55% percent don't have any knowledge about the medicine and medical treatment of patient (Table 26), a 55% percent don't have information about the security of house, a 54 % percent of care person don't know how to communicate with patient (Table 27) and in a percent of 43.13% of repo dents don't know anything about the eating menu or health problem.

In conclusion for Romanian's care person even they are involved in care patient process for more months they don't have enough information and knowledges for a quality medical care treatment so they can improve their attitude and behavior upon the patient.

Table 25. Do you have any knowledges to overcome patient behavioral

		Do you have any knowledges to overcome patient behavioral				Total
		no	low	medium	higher	
Country	Romania	62	34	3	3	102
	Turkiye	7	9	19	16	51
	Italy	0	4	10	6	20
Total		69	47	32	25	173

Table 26. Do you have enough information about the medicine for your patient

		Do you have enough information about the medicine for your patient				Total
		no	low	medium	higher	
Country	Romania	66	26	9	1	102
	Turkiye	6	4	12	29	51
	Italy	0	4	16	0	20
Total		72	34	37	30	173

"Funded by the Erasmus+ Program of the European Union. However, European Commission and Turkish National Agency cannot be held responsible for any use which may be made of the information contained therein"

Table 27. Do you know about the arrangement of the house for security

		Do you know about the arrangement of the house for security				Total
		no	low	medium	higher	
Country	Romania	60	36	5	1	102
	Turkiye	2	12	16	21	51
	Italy	0	4	12	4	20
Total		62	52	33	26	173

Table 28. Do you know how to communicate with your patient

		Do you know how to communicate with your patient				Total
		no	low	medium	higher	
Country	Romania	66	25	6	5	102
	Turkiye	4	13	15	19	51
	Italy	0	1	15	4	20
Total		70	39	36	28	173

For Turkiye and Italy we can mention that even the care person is involved for 1-5 months a short period in the medical act for their relative they have enough information and knowledges like in Tables 25-Table 29.

Table 29. Do you have the knowledge to deal with your Alzheimer's patient's eating problems

		Do you have the knowledge to deal with your Alzheimer's patient's eating problems				Total
		no	low	medium	higher	
Country	Romania	44	42	12	4	102
	Turkiye	4	14	13	20	51
	Italy	0	0	12	8	20
Total		48	56	37	32	173

5. INTERACTION BETWEEN VARIABLES

To see the interactions between variables and to give supplementary information regarding care person behavior, the results of the classification and regression tree (CRT) analysis for patients are shown in Figure 3.

"Funded by the Erasmus+ Program of the European Union. However, European Commission and Turkish National Agency cannot be held responsible for any use which may be made of the information contained therein"

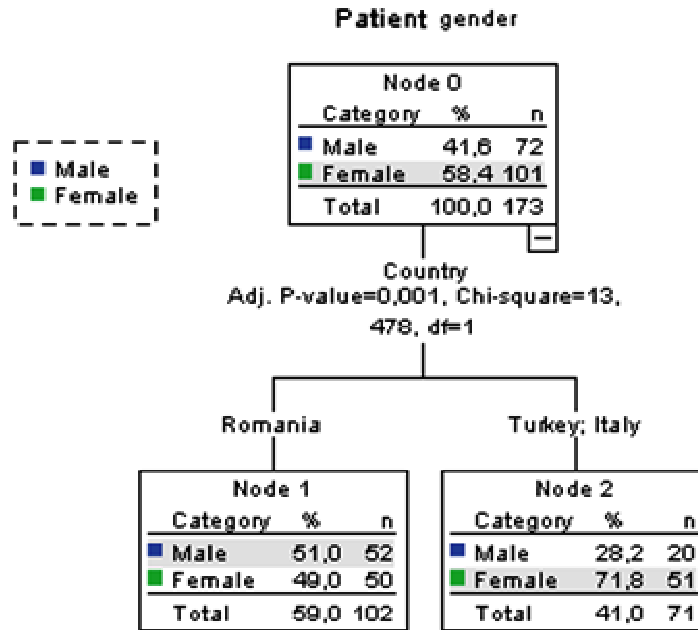

Figure 3. Classification and regression tree (CRT) results for patient gender

Regarding the characteristics for each country, we can mention that Romanian's patients are male in the biggest percent of 51% in comparison with Turkiye and Italy where the proportion it is in opposition with 71% percent female patient (Figure 4).

Regarding the caretaker knowledges about the arrangement of house for patient security Romanians obtain a biggest value for low knowledges in 69.2% percent in comparison with Turkish respondents who knows and have information regarding the security for patient in a percent of 62.7% and also Italians in a 27.1 % percent (Figure 4).

"Funded by the Erasmus+ Program of the European Union. However, European Commission and Turkish National Agency cannot be held responsible for any use which may be made of the information contained therein"

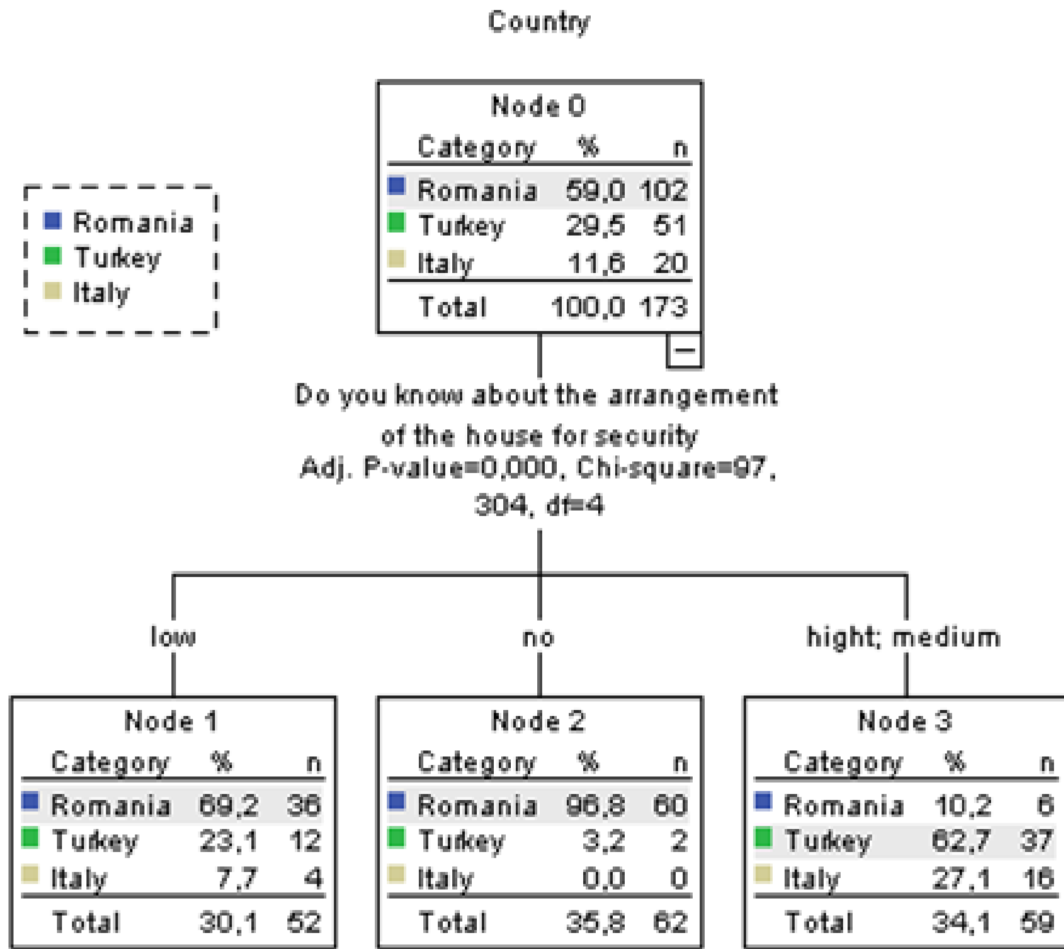

Figure 4. Classification and regression tree (CRT) results for house security

"Funded by the Erasmus+ Program of the European Union. However, European Commission and Turkish National Agency cannot be held responsible for any use which may be made of the information contained therein"

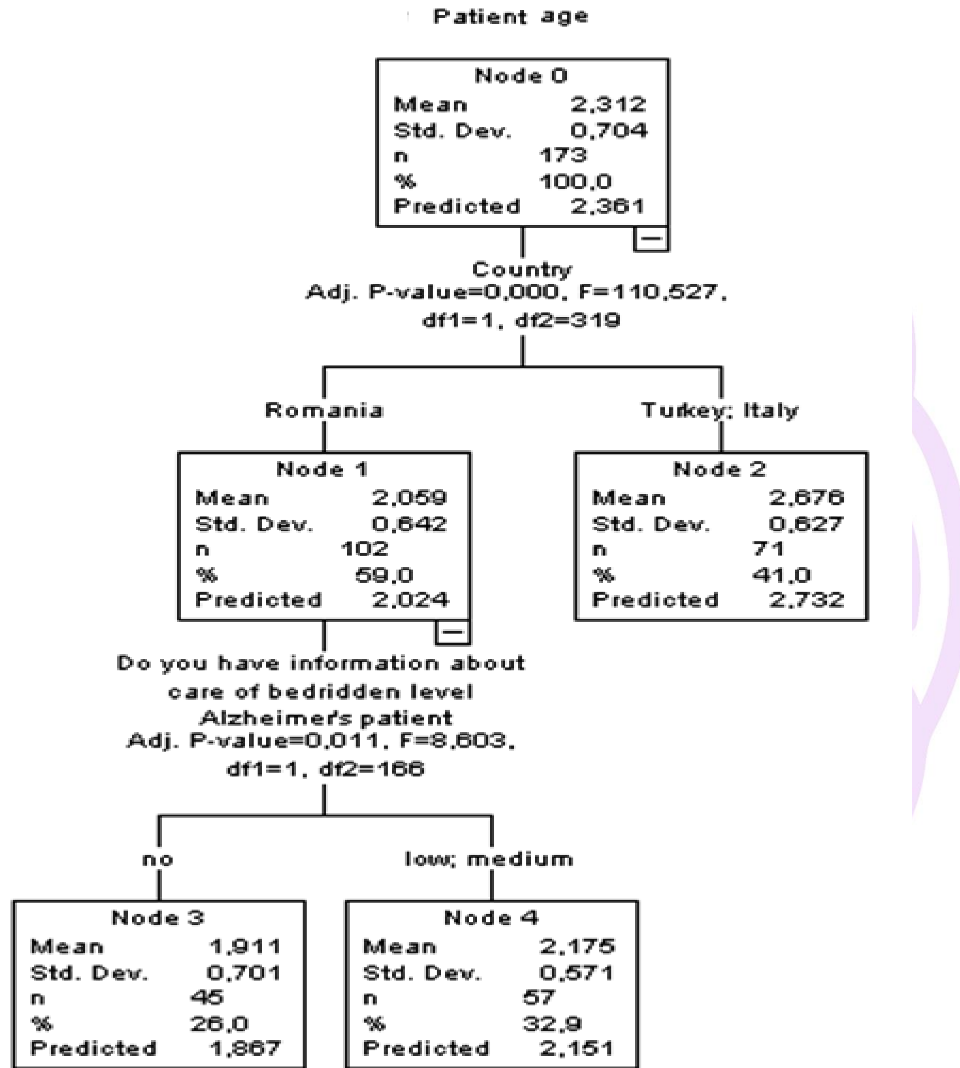

Figure 5. Classification and regression tree (CRT) results for patient age

"Funded by the Erasmus+ Program of the European Union. However, European Commission and Turkish National Agency cannot be held responsible for any use which may be made of the information contained therein"

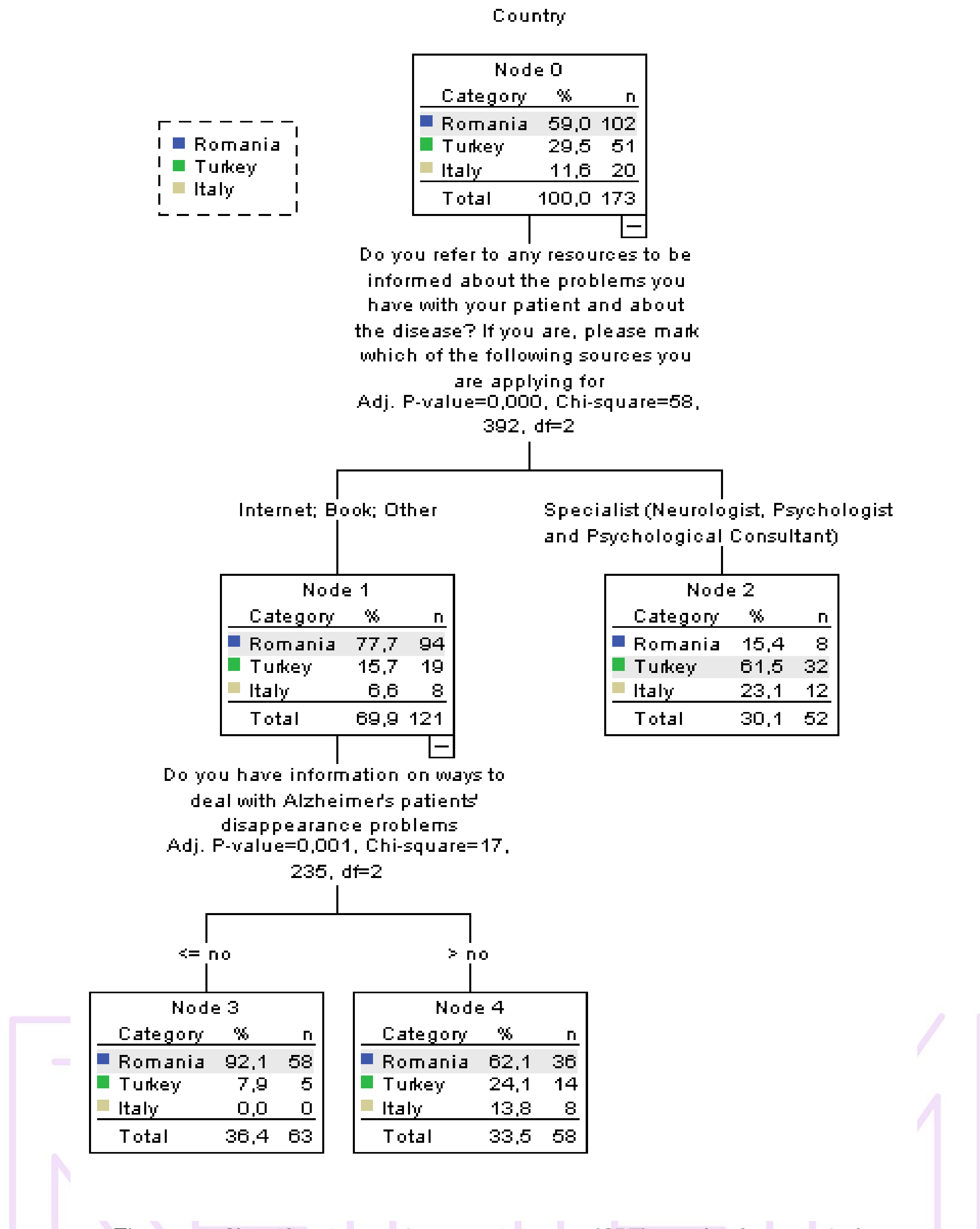

Figure 6. Classification and regression tree (CRT) results for care help

"Funded by the Erasmus+ Program of the European Union. However, European Commission and Turkish National Agency cannot be held responsible for any use which may be made of the information contained therein"

From the source of information, we can observe that Romanians obtain the information from internet, books and other sources in a percent of 77.7% of respondents and Turkiye and Italy form specialists and qualify personal in a percent of 61.5% Turkish respondents and in a percent of 23.1% Italian's respondents.

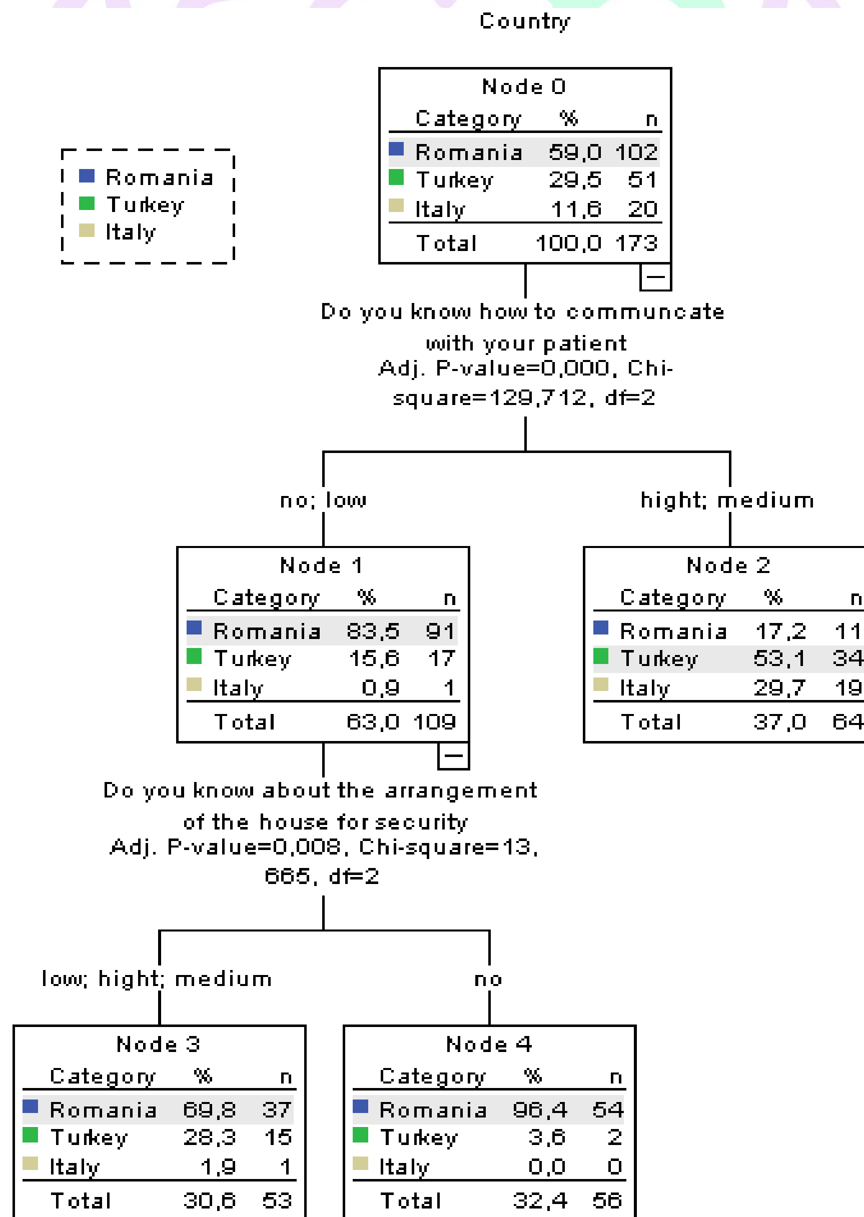

Figure 7. Classification and regression tree (CRT) results for communication with patient

A weak point for Romanians respondents in a 59% percent it is represented by the lack of information regarding. There may come a time when dementia can make

"Funded by the Erasmus+ Program of the European Union. However, European Commission and Turkish National Agency cannot be held responsible for any use which may be made of the information contained therein"

management difficult your financial assets and business. You may need that someone to do this for you. You can formally name one friend, relative or professional, who will hold a power of attorney will allow it to act on your behalf.

6. CORRELATIONS BETWEEN ITEMS

Transferring the database and using the Lisrel 8.7 program, it was possible to select from the 23 items only 19 specific items (discarding Items I3 and I4) The model established the correlation between factors influencing care behavior, patient and care individual characteristics, care needs and knowledge. The proposed model is presented in Figure 4.

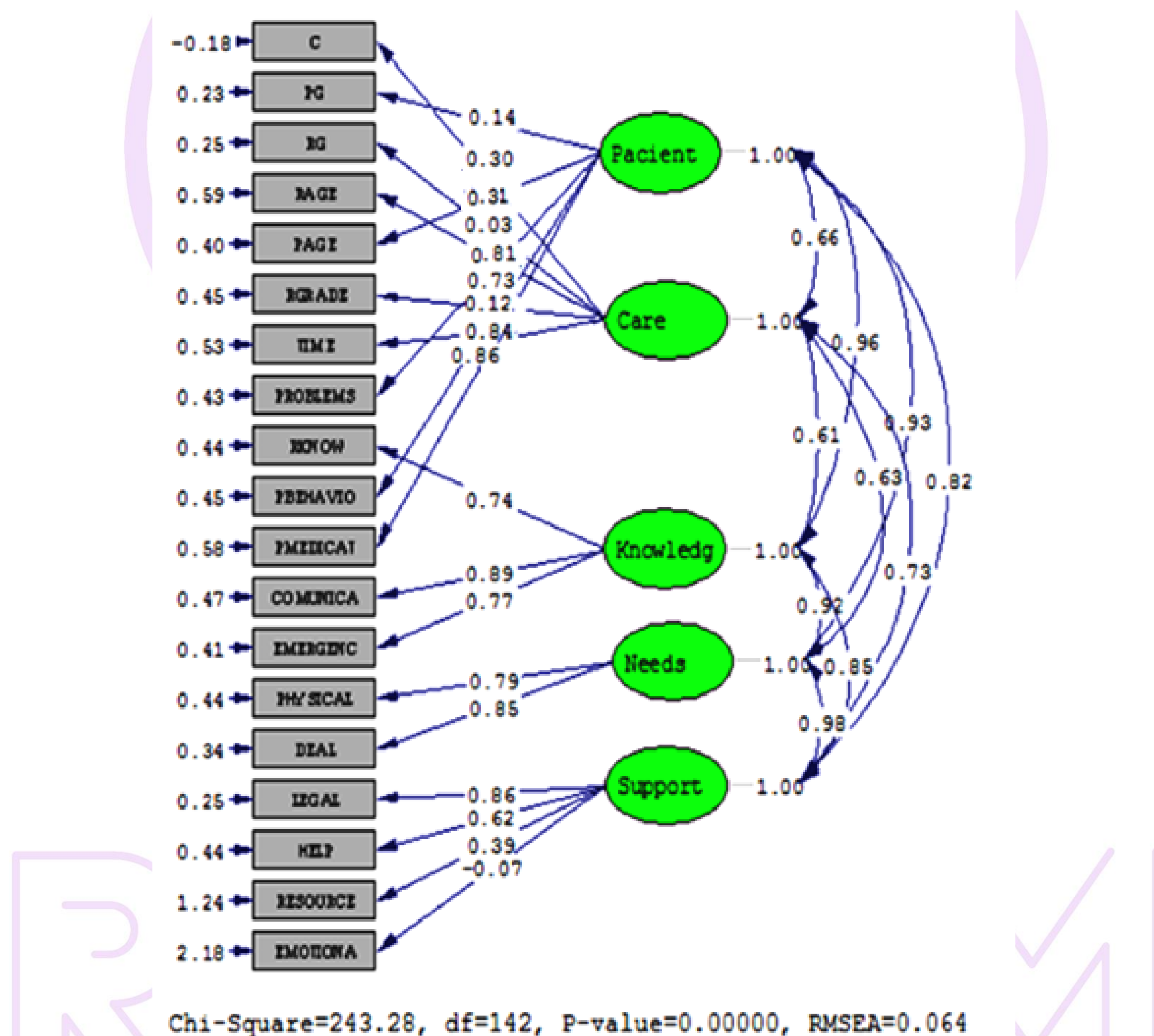

Figure 10. The proposed model

“Funded by the Erasmus+ Program of the European Union. However, European Commission and Turkish National Agency cannot be held responsible for any use which may be made of the information contained therein”

The results relation between knowledge –communication obtains the biggest value of 0.87, the reason it is that communication is not just about talking.
Gestures, movements, and facial expressions can give meaning and help you convey the message. Body language and contact become meaningful when speech is difficult for a person in need. It is important to encourage the person to communicate what they want any way can. Remember that we all feel frustrated when we cannot communicate consciously, or we are not understood.

The values are positive, and the strongest value connection exists between:

Strong relation		Value
SUPPORT	Support –Needs	0.98
	Support-Legal rights	0.86
KNOWLEDGE	Knowledge –Patient	0.96
	Knowledge –Communication	0.89
PATIENT	Patient-Problems	0.86
	Patient –Medication	0.81
CARE	Care-Time	0.84
NEEDS	Needs-Deal	0.85

The lowest value was obtained for the relation between support of caretaker and emotional part of care process a value of -0.07, which means that the caretaker must be strong and manage the situation having already all the information he/she need in the different stages of disease process, but not to be involved emotionally. The caretaker and family members are oriented to specialize authorities and organization to obtain and get information's and helping hand like in the table below:

Strong relation		Value
SUPPORT	Support –Resources	0.39
	Support-Emotional	-0,07
PATIENT	Patient –Patient age	0.31
	Patient –PG patient gender	0.14
CARE	Care-Patient grade	0.12
	Care-Country	0.30
	Care-PG patient gender	0.02

7. CONVENTIONAL CONSUMER CLUSTER

In order to identify subgroups of caretakers between Romania, Turkiye, and Italy, a cluster analysis was performed, taking into account the order of patient disease. A two-step group analysis (k-mean and hierarchical clustering) of the factors allowed the identification of 5 care groups with similar profiles (time care, knowledges and needs). The sample of 173 targeted care persons was divided into care clusters; the

"Funded by the Erasmus+ Program of the European Union. However, European Commission and Turkish National Agency cannot be held responsible for any use which may be made of the information contained therein"

variability of the preferences of the individuals belonging to the different clusters towards caretaker activities for patient was validated.
It was possible to analyze the sociodemographic components of the subjects within each subgroup in order to evaluate the effect of the individual characteristics (age, gender, time of care process) on the formation of attitudes and care behaviors.
Clusters were labeled according to major care traits (Table 30).

Table 30. Care conventional clusters

<table>
<tr><th>Items</th><th colspan="3">Clusters participants</th></tr>
<tr><td>Country</td><td rowspan="15">1</td><td rowspan="15">24</td><td rowspan="15">KNOWLEDGE</td></tr>
<tr><td>Do you Inow which are the patient problems in every stage of disease</td></tr>
<tr><td>Do you have enought knowledges to be able to pass the confusion</td></tr>
<tr><td>Do you have any knowledges to overcome patience behavioral</td></tr>
<tr><td>Do you have enought informatiion about the medicine for your patient</td></tr>
<tr><td>Do you know what entertaining and mental activities you can do woth your patient</td></tr>
<tr><td>Do you know about the arrangement of the house for security</td></tr>
<tr><td>Do you know how to communcate with your patient</td></tr>
<tr><td>Do you have knowledges to deal with hygienic patient problems</td></tr>
<tr><td>Do you have the knowledge to deal with your Alzheimer's patient's eating problems</td></tr>
<tr><td>Do you know what to do with the emergency physical illnesses of your Alzheimer's patient</td></tr>
<tr><td>Do you have information about which physical exercises you can do for your Alzheimer's patient</td></tr>
<tr><td>Do you have information on ways to deal with Alzheimer's patients' disappearance problems</td></tr>
<tr><td>Do you know what you can do legally regarding your Alzheimer's patient</td></tr>
<tr><td>Do you have information about care of bedridden level Alzheimer's patient</td></tr>
<tr><td>Relative age</td><td rowspan="3">2</td><td rowspan="3">41</td><td rowspan="3">CARE</td></tr>
<tr><td>Relative grade with patient</td></tr>
<tr><td>For how long time you take care of patient</td></tr>
<tr><td>Patient age</td><td>3</td><td>36</td><td>PATIENT</td></tr>
<tr><td>Do you refer to any resources to be informed about the problems you have with your patient and about the disease?</td><td>4</td><td>32</td><td>NEEDS</td></tr>
<tr><td>Have you received any help with your emotional and social problems as a patient relative?</td><td>5</td><td>40</td><td>SUPPORT</td></tr>
</table>

“Funded by the Erasmus+ Program of the European Union. However, European Commission and Turkish National Agency cannot be held responsible for any use which may be made of the information contained therein”

Five clusters were identified and labeled as follows: '' patient ''(characterized by age, gender and country'', ''care'' (characterized by age, gender, connection with patient and period of care), "care needs'' (characterized by needs of information about specific patient care), "care knowledges" (characterized by the certain types of knowledge in care process), "care support'' (characterized by high need of quality help and importance of other organizations).

Cluster 5: for 40 respondents help received from emotional and social problems as a relative patient it is very important to prevent and find solutions. Here, support form different organizations, volunteer associations and local institutions can focus on a niche in that kind of services; future targets will be care person who want to be inform who prefer specific and direct information but, because of their busy lifestyles, do not have enough time to make the research about treatment, medication or cure themselves. The organizations and qualified personal must identify a way to send information on the benefits of care -patient benefits. **Cluster 2:** care obtained the highest value for 41 participants, that shows, once again, that care person depends of the relative relation, family connection, age because they need a lot of patience and their behavior in relation with patient it is very important.

Cluster 3: for 36 participants patient age it is significant in the relation care – patient relation, a better understanding of patient needs, and manifestation of the disease are in direct relation with the patient age.

Cluster 4: for 32 participants the information obtain from different type of sources are important in the quality of patient life, to identify and apply different methods and obtain information.

Cluster1: 24 participants consider that the knowledge of care about patient disease are very important. Persons from each country should care about culture, identity and may feel they already have a sufficient understanding of the patient groups they are targeting. Looking to the future, care persons will only continue to become more sophisticated in how they identify and express themselves, which, in turn, will influence how their decisions. As patients become more sophisticated, cares persons should improve relation with the social organization and the specialized persons.

8.CONCLUSIONS

Taking in consideration the results we can suggest some solutions to improve the relation care –patient

For patient:

- ✓ Keep a journal and write down the things you want to tell you remember.
- ✓ Put a weekly schedule of activities on the wall.
- ✓ Put the keys in an obvious place, such as a large bowl the hall.
- ✓ Subscribe to a delivered newspaper daily to remind you of the date and day.
- ✓ Put labels on cabinets and drawers.

"Funded by the Erasmus+ Program of the European Union. However, European Commission and Turkish National Agency cannot be held responsible for any use which may be made of the information contained therein"

- ✓ Keep useful phone numbers with your phone.
- ✓ Write your reminders - for example, put a note on the front door reminding you to take it
- ✓ Keys.
- ✓ Save the names and numbers of people on your phone.
- ✓ Install security devices such as gas and smoke alarms.
- ✓ Enable direct debit for invoices so you don't forget to you pay them.
- ✓ A pill arrangement box can be helpful remember what medications to take and when.

Encourage a patient to communicate

- ✓ Try to start conversations with the person you are caring for especially if you notice that it starts fewer conversations.
- ✓ to encourage communication, involve:
- ✓ speak clearly and rarely, using short sentences;
- ✓ have eye contact with the person when talk, ask questions or start conversations;
- ✓ give them time to respond, as they may feel pressed if you try to hurry his answers;
- ✓ encourage her to join in conversations with others, when it is possible;
- ✓ allow them to support their point of view over time discussions on well-being issues and health state;
- ✓ try not to be condescending or ridicule what say;
- ✓ to get acquainted with what he says, really if it does not respond to your question or
- ✓ what he says seems taken out of context -show her that you understand her and encourage her to detail the answer;
- ✓ give him options simple – avoid to create options complicated for
- ✓ use other modes communication - such as reformulating questions because the person cannot answer as in the past.

10.REFERENCES

Zarit, Steven, Nancy K. Orr, and Judy M. Zarit. *The hidden victims of Alzheimer's disease: Families under stress*. NYU press, 1985.

Crespo López, María, Javier López Martínez, and Steve H. Zarit. "Depression and anxiety in primary caregives: a comparative study of caregivers of demented and nondemented older persons." (2005).

Aneshensel, Carol S., Leonard I. Pearlin, Joseph T. Mullan, Steven H. Zarit, and Carol J. Whitlatch. *Profiles in caregiving: The unexpected career*. Elsevier, 1995.

Aneshensel, C.S., Pearlin, L.I., Levy-Storms, L. and Schuler, R.H., 2000. The transition from home to nursing home mortality among people with dementia. *The Journals of*

"Funded by the Erasmus+ Program of the European Union. However, European Commission and Turkish National Agency cannot be held responsible for any use which may be made of the information contained therein"

Gerontology Series B: Psychological Sciences and Social Sciences, *55*(3), pp.S152-S162.

Montgomery, Rhonda J. V. and Karl D Kosloski. “Pathways to a Caregiver Identity and Implications for Support Services.” (2013).

Schermelleh-Engel, Karin, Helfried Moosbrugger, Hans Müller. "Evaluating the fit of structural equation models: Tests of significance and descriptive goodness-of-fit measures." *Methods of psychological research online* 8.2 (2003): 23-74.

https://www.publichealth.hscni.net/sites/default/files/the%20early%20stages%20of%20dementia_ROMANIAN.pdf

“Funded by the Erasmus+ Program of the European Union. However, European Commission and Turkish National Agency cannot be held responsible for any use which may be made of the information contained therein”