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ALZHEIMER'S DISEASE – MEDICAL AND SOCIAL ASPECTS OF THE DISEASE

This document is a contribution of MBAL "SOUTHWEST HOSPITAL" OOD in the process of a preparation of study on Alzheimer's disease under the project "Remote Healthcare Service Provision" with the acronym "RemoteCARE", Contract No. B2.9a.06
(according to Del.6.3.5 of the project)

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PREAMBLE

This document is the contribution of project partner 3 "SOUTHWEST HOSPITAL" OOD in connection with the implementation of result D6.3.5 under the project named "Remote Health Care Service Provision", Acronym: RemoteCARE, under the INTERREG VA Cooperation Program Greece -Bulgaria 2014-2020 (INTERREG VA COOPERATION PROGRAM GREECE – BULGARIA 2014-2020). The aim of the present study is to summarize from a medical and social perspective the problems related to Alzheimer's Disease in the cross-border region Greece-Bulgaria.

I. A medical overview of the problems associated with the spread of Alzheimer's disease

1. Description and symptoms

The disease on It 's Alzheimer 's chronically neurodegenerative disease , which usually everything develops slowly and gradually everything worsens over time. It is a reason for 60 – 70% of the cases on dementia . In the early stages the most common it's a symptom the difficult recall on recent events . As you progress on the disease everything symptoms also appear , such as speech problems , disorientation , mood changes , loss _ _ on motivation , difficulties at everyday activities and behavioral problems . With the deterioration on the general them condition the sick often everything pull back from the relatives you are also from society. Gradually others also disappear corporeal functions , as in finite account everything reach to death . Although that the speed on advancement on the disease can to be different , most often the duration on life after diagnosis is three to nine years .

The disease is described for first way in 1906 _ from the German one psychiatrist and neuropathologist Alois Alzheimer's and is named on his name, in developed countries the disease on Alzheimer's is one from the diseases creating highest expenses for society .

2. Vulnerable groups

How much often the disease is encountered on Alzheimer's ?

As of 2015 the count on the sick from the disease on Alzheimer's by the world is about 29.8 million . She everything manifests most often at people on age over 65 years , but 4-5% of the cases are earlier ones . The disease affects about 6% of the people aged 65 and over years . In 2015 _ she is a reason for death to 1.9 million people.

In Bulgaria the last one census allow on the researchers to give grades for this how much people they have the disease on Alzheimer's . In 2010, about 4.7 million people on age 65 and older A living with the disease on Alzheimer's . The statistical one report from 2013 on The association for the disease on Alzheimer's gives analysis on the affected population - small over one tenth from the people in age group over 65 years old they have the disease in the United States. In over 85 years the share reach to around one third . According to data cited in the annual report of Alzheimer 's Europe " for 2019 , the total number on people with dementia in Bulgaria is nearly 109,000, which everything equates at 1.54% of the whole population on the country . Women with dementia are two times more than _ the men . This everything owes mostly on the fact that the risk from

dementia sharply everything increases as you progress on age , and women over 65 years of age are significantly more from the men .

The forecasts are that until 2025 _ although expectations negative increment on the population , the number on people with dementia in Bulgaria will grew up to nearly 115,000 which will everything equates at 1.72% of the population . The situation only will everything worsened until 2050 , when _ the count on the sick everything expects everything increase to about 133,000 or 2.47% of the population . In short after 30 years the percentage on the sick will jump more from two times which _ means that the cargo on economic , health and social system too will grew up incredible . Po this one reason is exceptional important that they take urgent measures for dealing with the consequences from dementia – as for the families on the sick , as well as for the whole society .

The reasons for the disease on Alzheimer's no are enough good studied know that _ about 70% of the risk everything inherits from the parents on the patient through multitude connected genes . Others risky factors are previous ones injuries on the head , depression and hypertension . The development on the disease everything relates to the presence on senile plaques and neurofibrillary nodes in the main one brain . At suspicions for Alzheimer's the diagnosis usually everything confirms with a rating on behavioral and cognitive tests , often followed from brain imaging _ scanner and blood research , to eliminate others possible reasons . The initial ones symptoms often everything confused with normal aging . For final diagnosis is necessary research on cerebral tissue .

The used ones treatments give limited symptomatic improvements , but cannot stop or overturned development on the disease . The sick everything more rely on others for the service you are what often creates significant weights from social , psychological , physical and material character for the caregivers everything for them . Programs for physically exercises can help for implementation on everyday activities. Behavioral problems or psychosis as a result on dementia often everything treat with antipsychotics , but this usually no everything recommends , so like the benefits are small and growing the risk from early death .

3. Reasons for the disease on Alzheimer's

The reasons for development on the disease on Alzheimer's no are clarified . The hypothesis for accumulation on amyloid proteins in the brain is the most discussed . The most solid supporting data _ this one hypothesis , are from research on cases on early manifestation on the disease on Alzheimer's at hereditary burdened .

The mutations on genes that _ everything connect with the disease , se discover at half from patients with early manifestation . At all patients the mutations lead to excessive synthesis on specific form small ones protein particles in the brain called alpha beta (A β).

A lot scientists think that _ at bigger part from the sporadic ones cases , no by inheritance , accumulation them everything gets , probably because the organism is not able to transport these

particles, not because there is excess in synthesis them. On this one stage the scientists looking for ways to reduce the quantity of A β amyloid proteins in the brain.

Some things are more often related to the disease on Alzheimer's - then no everything observe so much often at people without disorder. Because of these factors they can have direct connection. Some from them are hindering everything or modifiable factors (eg the reduction on the risk from diabetes or cordial diseases can from his own country to slow down the risk from dementia). If the researchers acquire bigger understanding for the risky ones factors or scientific to prove some reasons for Alzheimer's, that can help to find ways for prevention or development on treatment.

4. Risky factors

Aging is basic risky factor. The probability from development on Alzheimer's jumps two times on every 5 ½ years at the adults over 65 to 85 years. From another country only 1-2% of 70-year-old adults are affected from the disease. According to some studies about 40% of 85-year-olds have Alzheimer's. Although this at least half from the adults over 95 years old no everything observe signs on the disease. Established are some genes whose availability shows promoted risk from development on the disease on Alzheimer's, but the genetic one factor no means certainly that the disease will everything manifestations at the carrier them. On this one stage the scientists are on opinion that carrier on the gene apolipoprotein E carries tallest risk for development on the disease on Alzheimer's. This one gen there is three allele - apoE2, apoE3 and apoE4. At most scientific research everything finds that the apoE4 variant has a high risk from development on the disease on Alzheimer's. Availability of apoE4 in the total population varies up to 30%, as more often everything reports for 8-15%. At the carriers on one a copy on this one gen everything observes two or three times taller risk from development on the disease on Alzheimer's. At those with two copies, which everything meeting at 1% of the population, se scores 9 times taller risk. Although the double carrier however, this no means that the disease will everything appeared. At 40% of the people who develop Alzheimer's without information for the disease in the family and those who it develop in later age, establishes carrier on the apoE4 gene.

The risks factors associated with the disease on Alzheimer's, include:

Inevitable risky factors

- Age – dementia is more likely at older people, but bigger share from the people over 85 years of age there is this than from over 65 years of age.
- The family history (inheritance on genes) – in families with Alzheimer's is associated with higher risk. This is the second one by size risky factor after coming of age on determined age.
- Having determined gene (apolipoprotein E or APOE gene) sets person, depending from the specific one you are genetics, with three to eight times bigger risk from person without gen.

Potentially avoided or modifiable factors

- Factors that _ increase the risk from bloody court (judicial) – including diabetes tall cholesterol and high blood pressure. (They too so increase the risk from stroke which can brought to another type dementia).
- Low educational and professional achievement .
- Previous trauma on the head .
- Disorders on the dream (eg breathing problem _ ac sleepy apnea).

The disease on Alzheimer's at younger people

Genetics is behind the early one phase on the disease on Alzheimer's , which affects people who _ have family story . Because of one from the three hereditary genes , it can affect and rejuvenate people , and it is unusual that represents less of 5% of all cases on Alzheimer's .

The association on Alzheimer's says in his early information that sometimes can to be “long and frustrating process ” , to confirm this one diagnosis , so like the doctors no expect to find Alzheimer's at the younger ones people . For the younger ones aged groups the doctors will looking for first reasons for others dementias .

Health specialists can too be incorrect to attribute the symptoms on stress, etc., or can disagree with the diagnosis .

5. Tests and diagnostics on the disease on Alzheimer's

The disease on Alzheimer's it's not easy for diagnostics - not only one test for it. Po this one reason the first something that _ the doctors they do , switch off others problems , before confirming whether mental ones signs and symptoms are enough heavy , to be species dementia or something other :

The doctors can :

- Ask for all diseases that _ you are is there to now
- They do physically review , to discover signs , for example , stroke , cordially disease or renal illness .
- Check it out neurological function , e.g. _ Through testing on balance , senses and reflexes
- .
- Samples from blood and urine

- Test on cerebral through scans (possibly including CT, MRI and EEG).

Sometimes the symptoms on dementia are hereditary related _ disease like the disease on Huntington , so that can make genetically research .

There is do biological test for the disease on Alzheimer's ?

There is no simple biological test , especially for the disease on Alzheimer's , which can be used from the doctors , due to which all diagnostic opportunities are intended to switch off others explanations for dementia , before confirming the reason for Alzheimer's .

The genetic test is possible in some situations , but it is contradictory and not completely _ reliably . Gene , famous such as APOE-e4, is associated with higher chances on people on age over 55 years , developing the disease of Alzheimer's.20

The question for the future ones biological tests everything researches intensively .

A lot symptoms for the biological ones changes in the brain are discovered from neuropathological work on brains studied _ at autopsy after death . This one and others kinds research can bring to future tests for measurement on new ones biomarkers . The genetic testing can make it more realistic variant – as far as the researchers continue to find reliable connections , so like discover new ones genes associations .

The genetic testing no it's always a good idea. came . The position of the association for the disease on Alzheimer's for example at testing with APOE-e4 is that it must not be everything uses routine and that no deliberately attitude by attitude on preventive measures , etc. , when everything uses like indication .

The treatment on the disease on Alzheimer's is targeted to delay on development on pathology , abbreviation or removal on those present symptoms . Timely begining on the treatment increases the chances for rescue on cognitive opportunities on the brain .

On this one stage medicine no has medicinals _ preparations , providing complete healing on the patient . They exist only funds whose _ use relieves the sufferings his . The treatment on disease on Alzheimer's with medication you are place for purpose recovery on intellect and memory . Also so everything leads struggle with the typical symptomatology on the pathology – the depressive condition , excitability , appearance on hallucinations . The medicinal treatment mandatory everything complements with psycho-social , as everything practice the following methods :

- o Cognitive ;
- o Emotional ;
- o Stimulants ;

o Behavioral .

The complex approach based on everything on the above methods , provides reduction on the intensity on manifestation on the disease on Alzheimer's and improvement on the condition on the patient . In separate situations even there is success at partially recovery on lost as a result on development on the pathology abilities and for return on the ability on person for at least partially self service . Apply everything art therapy , musical therapy , sessions on medicinal contact with animals (five-therapy) and many others practices .

DIET FOOD

The diet on a person suffering from disease on Alzheimer's , is practical so much as important as the pharmacological ones preparations . The right one choice on the ingredients on the menu allows to activate memory , to increase the ability for concentration on attention , and also so influences positively on the brain activity . The right one feeding can also considered as means for prevention on dementia . It must includes the following Ingredients :

o Antioxidants – they everything include in food in species on corn , celery , spinach , honey . Strong effect (antioxidant , immunostimulating , anti-inflammatory) exerts curcumin , which can Yes be received from the Indian one seasoning turmeric ;

o Omega - 3 are the most effective lipids for recovery on the processes on blood formation . These substances too influence positively on the condition on memory and stop the destruction on intellect . They can be received from olive oil , walnuts , seafood products . Helpful would either periodically _ compliance on Mediterranean diet whose _ basis are namely the marine ones gifts _

o Amino acids contribute for recovery on the brain activity and improvement on the condition on the nervous ones cells . Especially regularity is important procurement on the body with tryptophan and phenylalanine . Theirs sources are the fresh ones fruits and vegetables , nuts , greens spices and dairy products ;

o The products intended for normalization on intestinal activity , too are a lot important . In the menu must mandatory to be present meat , eggs , black liver and grains foods . There are also products that are desirable completely switch off from the menu on man , mowed down from disease on Alzheimer's , or at least to be reduced theirs quantity .

Such are :

- o Fat meat ;
- o Pasta products ;
- o Sugar ;
- o Angry spices and sauces .

Like whole is necessary always to be controlled the level on carbohydrates and fats in products that _ are present in the menu . The shortage on liquids too influences negative on the condition on the brain . A person with a disease on Alzheimer's must consumes minimum 2 liters clean water on day . Preferably drinks green tea , useful are also freshly squeezed juices . The portions for sick is best not be big , and the process on eating must to be slow . If the disease turn into severe form , are likely difficulties with swallowing .

6. Prevention of Alzheimer's disease

It is obvious that the main one factor for dementia - heredity - no cannot be influenced , nothing no an Yes everything do with age . But to slow down the threat can everyone.

Actions directed _ for prevention on disease on Alzheimer's , are a lot easy . Must only Yes everything they take given the following rules :

o The indicators on sugar in the blood , arterial pressure . The parameters everything hold under control , and at necessity everything stabilize with preparations ;

o Continuous walks . It is desirable that Yes wear daily character ;

o Workouts for mentally development . The solution on mathematical tasks (without use on calculator) and the solution (composition) of crossword puzzles and more logically exercises . It is also useful the active participation on a person in social activity , undertaking on public functions ;

o Strengthening on the memory . Studying on foreign languages , learning on poems , memorization on excerpts from stories . Application on special techniques (eg inventing on associations) instead use on notebook ;

o Correct daytime mode . Alternation on leisure and work , absence on overtired ;

o Healthy sleep . The duration on the dream must Yes be 7-8 hours . This provides reduction on the concentration on beta-amyloid protein , forming in the nervous cells . Focusing his in the brains tissues increases the risk from development on pathologies ;

o Moderate physically loads . A visit on pool , long walks , easy gymnastics . Especially alternating walking is recommended _ on slow and fast pace . The physical activity influences positively on blood circulation and activates the brain activity .

There is risky factors , of who the patient is necessary Yes everything deliver within _ on prevention vs disease on Alzheimer's :

o Cigarettes , too so the alcoholic ones drinks used in large _ quantities ;

o The unhealthy one food including _ excessive quantity animal fats , " wrong " carbohydrates (sweet foods) . The absence on vitamins in everyday life nutrition ;

o The regular neglect on the 8-hour sleep ;

o Stressful situations ;

- Redundant weight ;
- Prolonged residence in premises which _ no everything ventilates .

All listed rules they can Yes everything consider only for conditional prevention on disease on Alzheimer's . Even the correct and the timely treatment no deprives the disease on Alzheimer's from the status deadly dangerous pathology . According to the statistics patients suffering _ from this one form on dementia , live no more from 8-10 years after the moment from the placement on the diagnosis . The character on the manifestation on the disease is different , being possible continuous stabilization and slowly development . The doctors are unanimous that _ to death leads no so much herself pathology , how much the diseases occurring meanwhile : infections , pneumonia .

The correct one treatment and the good care extend life on the person with the disease on Alzheimer's. For sorry , no they exist real methods and means which _ they can Yes prevent the beginning on disease from dementia from Alzheimer's type . In progress are different studies which _ are directed to etiologically clarification on the disease which possibly Yes allow adequate prevention. What are the recommendations , after placing on the diagnosis? Especially it is important to everything organize appropriate and individual psychotherapeutic and rehabilitation program for the sick . It is good in its execution Yes be included specialists from different specialties - psychologist , neurologist , social worker , medical sister , which team and full Yes assisted the patient Yes be built into society and the family you are and yes postpone maximum long the moment in which will there is need from foreign help , for Yes performs the everyday ones you are activities . At availability on such pathology from first and foremost meaning yes _ everything works with members on the family on such sick , of who must Yes be clarified the essence on the disease , the need from bigger attention to the patient , the changes who occur in behavior on theirs close and the fact that them are unconscious and not malicious .

There is no known treatment for the disease on Alzheimer's - death on the cerebral ones cells at dementia no can Yes be stopped or reversible . There is however big support for therapeutic interventions that _ they help on the people Yes live with the disease on Alzheimer's

The association on Alzheimer's includes the following important elements on the care for dementia :

- Effectively management on all states which _ everything meet along with the disease on Alzheimer's
- Activities and/ or programs for cares for adults
- Groups and Services for maintenance .

Medicinal therapy

There is no morbid modifying medicines for the disease on Alzheimer's , but some from them they can Yes reduce the symptoms and yes help for improvement on the quality on life . There is four drugs in a class called inhibitor on cholinesterase :

- Donepezil (brand name Aricept)
- Allanthamine (Reminil) □ Rivastigmine (Exelon) □ Tacrine (Cognex).

Another species drug , memantine (Namenda), antagonist of the NMDA receptor , can Yes everything uses independently or in combination with an inhibitor on cholinesterase .

Like at the others kinds dementia and neurodegenerative diseases , the main one part from the therapy at patients with the disease on Alzheimer's is coming from the support provided from healthcare workers , for insurance on care for the quality on life which _ acquires everything bigger meaning , so like the need everything increases . Most of them people with dementia they have fragile self-esteem , that's why it 's special important the surrounding them Yes they continue Yes everything relate to them with respect , no matter how advanced she is the disease . Most importantly yes we continue Yes them we love and value , even if the person them Yes everything change because of the disease !

- Make an effort everything Yes comply with the main ones rules which _ are is there a before the disease - for example if you are they knocked always before Yes enter the bedroom on man , do it and after the appearance on the disease ;
- If the man everything needs from help for personal activities like bathing and walking to toilet , try it everything this Yes everything performs possible most intimately – on closed door etc.

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Help out the patient Yes everything feelings good with myself you are !

At the care for someone with dementia is important Yes everything they take given his abilities , interests and preferences . They they can Yes everything change as you progress on dementia . The dementia influences on thinking , logic and memory , but the feelings remain unchanged . A person with dementia is likely sometimes Yes be sad or upset . In the earlier ones stages on the disease the face can Yes asked Yes talk for their own cares and problems . When this everything happened :

- Try it everything Yes find out how everything feelings _
- Try it everything Yes it support , not Yes it ignore or reject ;
- No avoid the discussion on the problems , however painful Yes are or however minor _ Yes they look
- Listen and show that _ you are on theirs disposition .

Offer on the patient sorry elections . When possible , inform and explain _ on the patient . At each comfortable opportunity his give it right Yes does own choice . Try it everything Yes you explain that which _ you do and why it you do . For people with dementia the taking on answer can Yes them it seems a lot confusing . That 's why it's good Yes it they do for simpler things . Formulate the questions , so that them Yes must Yes respond only with " yes " or " no " to them .

Take away with respect _ to the patient!

- Avoid situations in which the sick can Yes everything felt humiliated that _ no succeeds Yes everything manage _
- Do the things together with him , not alone for the sick
- Ours self respect it is often related to the way in which which we look Encourage the person Yes everything proud of the external you are species .

Care for _ the patient

Make sure know that _ all involved in care for the face they have enough information and are aware of the present situation . This will them help Yes they see the person , for which everything they care overall . This can too Yes them help Yes everything they feel more confident for finding on topics for conversation and yes offer pleasant occupations on the patient .

The relatives on the sick from Alzheimer's they can Yes emphasize the following important aspects :

- It 's not shameful Yes you have dementia . Person there is no guilt for this .
- If the sick everything hold by way , often found for irritating and depressing , that it 's not intentional - he owes everything on the disease .
- The person with dementia can Yes you are remembers the distant past a lot more clearly from recent events . They would were happy Yes talking for their memories , and yes there is who Yes them listens .

Although the similar ones symptoms , dementia everything reflects on the different ones people by different way . Everyone a person with dementia there is unique individuality , own individual experiences , their own feelings .

- Everyone third person after age 65 suffers from any form on dementia
- Until the age of 65 the disease on Alzheimer's everything meeting comparatively rarely , and under 50 is exceptional a rarity . Between 50 and 65 years sick no more of 2% of the population . In age group between 65 and 85 years however the frequency jumps from 2-3% to 30 per hundred

, which means that _ everyone third person on The Earth suffers from any form on dementia . The scientists already are aware of the mechanisms , which arises the disease on Alzheimer's , that is the series phenomena which _ damage the brain .

- "At the core on all these phenomena or on these changes standing formation on one protein which _ normal it not in the brain . This one protein everything turns out that after the appearance you are slowly and gradually destroys the nervous one cell . The process begins almost imperceptible , imperceptible and whatever we found out in the last ones years - starts 10-15 years before the classic one form , which until yesterday only we called " Disease on Alzheimer's " .

Possible Is it prevention ? on Alzheimer's ? Until 4-5 years ago that was it scientific fantastic in this one district . There is determined factors which _ proven assist the reduction on the risk . This are the Mediterranean diet , cup Red wine , social contacts , which no it's fine Yes they quiet down after the 65th year , creatively activities and reading . On West is a lot developed people in retirement age Yes everything they study Yes are playing on musical instrument , record everything on courses by drawing or in theaters piles because _ all these activities everything they show protective for the brain . To this the scientists they add simple a walk in the park a few times weekly of 40 minutes up to 1 hour and at least 7 hours sleep because _ the brain there is need from sleep and in the right ones hours . According to some scientists , sleep it 's even on secondly place the protective ones functions , regardless from generally accepted understanding that with progress _ on the age we can Yes we sleep less . The combination on more activities also leads to better effect .

The scientists advise Yes let's emphasize more on vegetables , olive oil and fish , yes let's reduce it the taste to the pork meat and fats food and point out that in our country everything overdoes the concentrates , and the wine remains on rear plan . Except this , for Yes everything protect from dementias , with age must Yes reduce the calories and yes no we allow rough deviations in the body weight . Reading there is basic , a lot important role in protection on the brain because enriches ours neural networks , reading in all of them his forms such as activity , such as activity on the brain .

Already there is also a different one species software for cerebral stimulation , as similar sessions everything recommend at least 4 times weekly by one an hour , that's it gives example with Finnish program for prevention in which the application on similar software was _ among the four leading the method for research on people at risk groups .

Prevention must Yes start still in middle school age because " the bad protein " works asymptomatic

- When we talk for prevention , you must Yes everything let's turn to the average age , " yes everything direct to the people , at which "the bad protein " is in initial stage or who everything more do not have postponement of "the bad one ." protein " .
- " The bad one protein begins Yes everything forms in our brain on age about 50. On age between 50 and 60 he will everything pile in the brain , it will reach definitely quantity , will destroy

determined number cells and so on like reach the destruction on the cells - one threshold of 60 percent , yes say , in a given structure , really then will let's start Yes we forget because forgetting is one from the first ones symptoms " .

- 20% of the people who will they have the bad one protein , maybe would never there is no Yes develop symptomatology on dementia because of protected mechanism on the organism which everything activates spontaneously . Thus , 50-year-old people , at which is registered the bad one protein , they live to deep old age with clear mind . This is directed the scientists Yes are researching the protective ones factors .

- They do everything two studies which _ confirm availability on this one protein in the brain on almost 100%. Positronic emission tomography or lumbar puncture they can Yes confirm this . These research everything combine with research on intelligence with tests , scanner or magnetic resonance . " Everything this , taken together , at one a person who even there is no memory from symptoms for violations on intellect , maybe Yes predicted whether he in 10 or 15 years will develop Alzheimer's disease " . As like the positron one emission tomography for example , it is expensive everywhere by the world it costs 1500 euros , you should Yes everything direct to programs for early diagnosis and injured screening , he thinks he .

- The picture on dementia everything has been developing for 20 years after like the bad one worked protein "

- Everything it starts with innocents intellectual disorders , follows _ forgetting on recent events , commitments , arrangements from before a week or two days , and herself picture on dementia everything has been developing for 20 years after the beginning on the first one protein in the brain . " The brain is like that arranged that _ the old ones memories everything store on different places and they everything damage quite a lot later . It loses everything the skill Yes we store or Yes we form new ones memories . The structure which answers for remembering on the new ones events , she is one from the first ones objects on attack on the bad one protein " .

- Most risky factor for the disease on Alzheimer's remains the age . Avg the first ones symptoms everything indicate the loss on close ones memories , the difficulty ability for creation on multi-level plans , reluctance Yes everything they study new ones things and yes everything change acquaintances places and routes . " Usually people 65-70 plus especially with a lot bigger reluctance change the software on the phone you are or they buy new species phone , or change the software on the computer si , if work with him , or change the destination for rest , or choose new route Yes everything move from one point to another " . If there is accumulation on these factors , is good Yes everything stepped up to screening . The specialists us have almost _ everything with which they have developed European countries , for early diagnostics on this one process , and the NHIF covers the necessary research for placing on diagnosis in comparatively wounded stage .

- In the times before scanner and nuclear magnetic resonance the doctors no are were aware what are the reasons for the dementias . Separate cases and patients are them directed to one or another zone on the brain . Now it's different :

- " We we can Yes set one task mental on one man , yes it put in one apparatus like magnetic resonance and yes visible which are the areas in the brain that currently perform this one task in real life time which _ gives opportunities already Yes rethink the whole you are concept for the device and for the function on the brain , namely we saw that so the named areas responsible _

supposedly for one function , participate in many others functions . Only that no perform such main role or them they play one way main , one way secondary roles , but participate continuously in various relationships with others centers on the brain . So everything created the concept for the brain like sum from neural networks , from networks from neurons that _ continuously communicate between are and which ones everything regrouped by dependency from the species on the mental activity that currently _ _ us everything imposes Yes we implement " .

- The symptoms on dementia can Yes everything detain or Yes everything deteriorate over time , but after like the disability everything appeared once , the options for treatment are limited . The medicines for Alzheimer's sometimes they help , but usually offer temporary relief and weak improvement on memory and thinking activity .

- As like the risky ones factors for the disease are connected bony with the heart is very important Yes everything build habits for the good his health like maintenance on the weight in the healthy norm , refusal from smoking , regulation on blood pressure , changes in the way on feeding .

- The tall ones levels on bad LDL cholesterol yes they also increase the risk from a stroke . According to a row studies , admission on statins lowers the risk from cerebral blow at men over 60 years of age with between 6.5-8% for period for 10 years . Except this statins lower the risk from repeated a stroke .

- Okay it is known how important it is the regular one physical activity for maintenance on body in good health . Recently completed research tracks for period for 10 years over 2000 people on age over 60 years and discovers direct connection between the elevated physical activity and downgrades risk from dementia . The scientists claim that _ the regular movement influences on the size on hippocampus - the part from the brain , related to the short-term memory . It is recommended in the everyday program Yes everything turn on activities like tennis , riding on bike , walking on foot .

- Some specialists claim that _ the moderate reception on alcohol can Yes there is positive effect on the disease , but understand everything excessive use unlocks a row negative results . So for example , from one country cup Red wine can Yes relax blood vessels vessels and yes improve blood circulation . The big ones quantities alcohol however , they can Yes provoke fibrillation on the heart ones cameras - kind irregular cordial rhythm , which increases up to 5 times the risk from a stroke .

- Similar on the muscles , the brain too there is need from regular " training " . The mental one labor can Yes improve blood circulation to the brain similarly on the physical ones exercises that _ train the muscles . After determined age is special important the brain Yes be regularly stimulated through solving on crossword puzzles , different logically games , acquisition on new ones skills , learning on languages .

- The disease on Alzheimer's there is a row early ones symptoms which _ often they happen underestimated , so like everything give lightly _ hand just on progress on the age . Here it is most often met among them , on who not always everything turns timely attention :

Get up do a question for natural means for fight against the disease , the most established and widespread from them it is undoubtedly ginkgo biloba .

Big part from the precious ones substances everything contains in the leaves his , from where everything the extract also extracts for the medicinal ones his forms . It is not desirable acceptance his without preliminary consultation with specialist . Proven are the following his properties :

- antioxidant - decreases count on the free ones radicals in the body
- anti-inflammatory - reduces determined unfavorable functions on macrophages - cells belonging to immune system which _ however at given conditions they can Yes cause inflammatory processes ;
- improves blood circulation , influencing on the red ones blood bodies ;
- involved in the process on production on nitrogenous oxide ; □ limits formation on platelets

- Cinnamon
- Way - inhibits the beginning on the disease
- Fish with cold water
- Turmeric
- Tomatoes
- Cruciferous vegetables and leafy vegetables
- Probiotics
- Chicken

The dementia on Alzheimer 's is a disease which those affected they become everything more forgetful . In advanced stage them often already no recognize even the relatives you are relatives and theirs judgment and linguistic skills too are decreasing . The exact ones reasons for this everything more no are final clarified , but now we know that incorrect the folded ones proteins (so the named betaamyloid proteins) se postpone between the nervous ones cells on the brain . They violate communication and supplies you are what them drive Yes die with current on the weather .

- Most of them people everything deal with the subject for the disease on Alzheimer's only when the symptoms already everything appear or are affected relatives . It can Yes there is meaning Yes everything occupy in advance with the subject and yes turn over attention on the healthy one way on life like whole , for Yes prevent the disease on Alzheimer's as much as possible .

It 's good to everything knows :

The pathological ones deposits everything form a lot early at affected - the degeneration usually begins 20 to 30 years before the appearance on the first ones symptoms .

- For sorry , the development on the disease on Alzheimer's no can Yes be completely prevented . They exist however some measures which _ protect from all shapes on dementia and due to this sometimes help and for prevention on the disease on Alzheimer's . The main one way for reduction on the risk from disease is through healthy way on life .

It is now known also that _ some risky factors like high bloody pressure or tall levels on cholesterol are related to dementia . If you want Yes prevent the disease on Alzheimer's , you have to regularly Yes observe these healthy problems with your a doctor .

- A lot patients often they come to the doctor's office cabinet only when the neurodegenerative disease on the brain is fine advanced . it is the early one discovery it's actually a lot important . Because : How much earlier be placed the diagnosis , so much better can Yes everything influence on the disease . Because of this one reason is recommended Yes are you up to date and yes everything consult a doctor in a timely manner . He can Yes gave additional recommendations for prevention and treatment on the disease on Alzheimer's .

A. Do everyday strategic games

The activities that stimulate the brain , they help Yes everything slow down the risk from development on Alzheimer 's because support the brain active . So that , must Yes save 15 minutes on day , for Yes perform activities as :

- Do it strategic games , puzzles or crossword puzzles .
- Learning on something new , like for example speaking on new language or playing on instrument ;
- Train the memory , memorizing the list for shopping for example .

Another one activity which _ stimulates the brain , is reading on books , magazines or newspapers because _ except reading the brain withholds and information , training on different functions .

B. Do 30 minutes exercises on day

The regular ones exercises they can Yes reduce the chances for development on Alzheimer's by up to 50% , so that it is important Yes you do 30 minutes physical activity 3 to 5 times weekly ..

Some recommended physically occupations are for example tennis , swimming , cycling , dancing or game on team games . Except this can Yes everything introduces physical load by different time on the day , as for example climbing on stairs , instead Yes take it the elevator , for example .

C. Accept Mediterranean diet

The food by Mediterranean diet , rich on vegetables , fish and fruits helps for the right one nourishment on the brain , preventing serious problems like the disease on Alzheimer's or dementia . Some advices for feeding are :

- Eat 4 to 6 small ones meals on day helping _ for maintenance on the levels on sugar stable ;

- Eat fish , rich on omega 3, such as salmon , fish tuna , trout and sardines ;
- Eat foods , rich on selenium , as Brazilian nuts , eggs or wheat ;
- Eat green leafy vegetables everyone day ;
- Avoid foods with high content on fats like sausages , processed products and snacks .

Except that prevents the disease on Alzheimer's , the balanced one Mediterranean diet also helps for prevention on cordial problems such as cordial blow or cordial insufficiency .

C. Drink 1 cup each Red wine on day

The red one wine there is antioxidants that _ they help for Protection on the neurons from toxic products , preventing the disability on the brain . Po this one way is possible Yes everything supports the brain healthy and active , preventing development on the disease on Alzheimer's .

D. _ With a sleep of 8 hours on night

Sleeping at least 8 hours on night helps Yes everything regulates the job on the brain , increasing the ability for thinking , storing on information and solving on problems , preventing the appearance on dementias .

E. Maintain blood you are pressure under control

The high bloody pressure is associated with the early begining on the disease on Alzheimer's and dementia . Po this one way patients with hypertension must Yes observe the instructions on the general practitioner doctor and yes they do at least 2 visits annually , for Yes appreciate blood pressure ..

Accepting this one way on life , the individual there is smaller risk from development on cardiovascular diseases and will stimulates the brain function , as there is lower risk from development on dementias , including the disease on Alzheimer's ..

Learn more for this disease , how Yes it prevent and how Yes everything care for the person with the disease on Alzheimer's :

Studies in the field on the disease acquire through the last ones years extremely meaning , due to the increase on the duration on life on the people . The big one is indisputable socio-economic and medical significance on diagnosis , treatment and care for the sick in ours country like quickly aging nation . Affected are 5.4% of the people over 65 years and his appearance everything increases with age . The number on those affected people will everything doubles on every 20 years up to 115 million to 2040 according to the data of Alzheimer Disease International (ADI) World Report Alzheimer 2010. In the European union more of 160 million souls are on age over 60 years

. The rude one assessment for distribution on dementia is about 6.2%, which means almost 9,950,000 people they have any form on dementia . Almost 14 million Europeans everything expects Yes they have dementia in 2030. Recently in Bulgaria it was conducted study having _ for purpose Yes determine distribution and types dementia , as well as mild cognitively violation at persons over 65. Those established percentages are comparable to those in others countries - 7.2% patients with Disease on Alzheimer's , 6.7 are with LCN, like Illness on Alzheimer's is the most common type dementia (3.1%), followed from SD (2.0%). The exceptional medico-social significance on this devastating human intellect state is a result as from the tall one morbidity and progressive loss on autonomy on the sick , as well as from the specifics on the necessary care , demanding exceptional health , moral and financial expenses .

The main ones measures meet the scary one disease, in general include :

1. Early and punctual diagnosis on dementia in all hers forms .
2. Construction and regulation on the system on organization for conducting on timely and adequate therapy on the demented states .
3. Preparation on current and consistent with the principles on pharmacoeconomics therapeutic drug schemes _ positions registered in the Republic Bulgaria - in pre- hospital and hospital settings conditions .
4. Conduct on adequately treatment and through system for cognitively stimulation in the early and moderate stage on the disease with participation on interdisciplinary tim * , trained for working with the demented sick .
5. Preparation on current and consistent with the principles on pharmacoeconomics therapeutic schemes for conducting on primary and secondary prevention at vascular and mixed forms on dementia .
6. Preparation on recommendations for fight against risks factors for vascular dementia .
7. Periodic control from total the practitioner doctor and consultations with specialists .
8. Crafting on clinical recommendations such as part from the rules for good medical practice with algorithms for diagnostic , prophylactic and therapeutic pre - hospital and hospital process medical help .

* With the mandatory participation on a psychologist or qualified doctor _ by clinical neuropsychology .

TARGET GROUPS - Everyone patients with newly discovered cognitive violations from listed basic

types : • Disease of Alzheimer 's (Disease on Alzheimer's

EXPECTED RESULTS • Early and adequate diagnosis and treatment on already manifested cognitive disorders and demented conditions • Postponement and prevention on the heavy ones stages on dementia related to full loss on autonomy on patients • Early and adequately diagnosis on the persons with LCN and elevated risk for development on demented syndrome • Significant lowering on morbidity , and from there and on the huge ones medico-social expenses which _ requires the care on patients with manifested dementia • Decrease on the quantity medication and expensive the cost hospital treatment at this one contingent sick • Assisting on neurologists from pre-hospital help for placing on early and punctual diagnosis , conduct on correct treatment and performance on effective prevention on dementia in its main forms ; • Restriction on the quantity used medications at patients with dementia and improvement the quality on life on these sick • Lowering on the direct and the indirect expenses on society , of the patient and his family .

The disease on Alzheimer's (Disease on Alzheimer's) is a type dementia which _ long time was diagnosed accordingly the criteria of the National Institute of Neurological and Communicative Disorders and Stroke

– Alzheimer's Disease and Related Disorders Association (NINCDS- ADRDA), 4th ed of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) and 10th revision of International Classification of Diseases (ICD-10). The used ones NINDS/ADRDA criteria no were revised more for 25 years . In 2011 , the National Institute on Aging and the Alzheimer's Association (NIAAA) revised the main ones clinical criteria for dementia . In them everything distinguish three phases on Illness on Alzheimer's :

- 1) preclinical asymptomatic ;
- 2) pre-eminent symptomatic and
- 3) demented .

They respond on the needs on general practitioners doctors without access to neuropsychological research and specialized methods on imaging and liquorice markers , as well as on the goals on the scientific ones research and specialists in specialized centers .

The second big group contemporary criteria are of the International Working Group (IWG) 2007, 2010. According to them the diagnosis can Yes everything established in vivo of the base on clinical-biological markers . Both _ groups criteria include the contemporary knowledge for the prodromal symptomatic stage on Illness on Alzheimer's and hers biomarkers . In 2014 they are published recommendations for harmonization on both groups criteria which _ everything founded on the scientific ones research achievements _ on the biomarkers at Illness on Alzheimer's and are applicable in the clinical practice (Morris JC et al & B. Dubois , J of Internal Medicine, 2014). The present one consensus accepts the application on these harmonized criteria in the diagnostic process on Illness on Alzheimer's . The new ones diagnostic criteria allow : - yes everything put the diagnosis earlier - yes everything achieve bigger specificity on diagnostics - yes everything put the diagnosis by means of positive arguments , not only by the principle on shutdown on others reasons for the cognitive violation . Vaz basis on the studies on the biomarkers , the new concept for Illness on Alzheimer's determines the disease like progressive disease which _ starts with biological changes in the brain without accompanying cognitive disorders (asymptomatic phase) , passing in phase on memory disorders with abnormal biomarkers characteristic for Illness on Alzheimer's and beyond to mild , moderate and severe phase on dementia . The appearance on minimal clinical expression in combination with biomarkers for Illness on Alzheimer's everything accepts for symptomatic Illness on Alzheimer's even in the prodromal / predementia phase (phase on the easy one cognitively violation) .

Criteria for dementia at Illness on Alzheimer's with integrated biomarkers Probable dementia at Illness on Alzheimer's - based on clinical criteria + β - amyloid biomarker and/ or biomarker for neurodegeneration Possible dementia at Illness on Alzheimer's with atypical flow - based on clinical criteria + β - amyloid biomarker and biomarker for neurodegeneration Dementia a little probable Yes everything owes on Illness on Alzheimer's - lack of β - amyloid biomarker and biomarker for neurodegeneration Proposal on the consensus Recommends everything acceptance on the harmonized ones criteria from 2014 for Illness on Alzheimer's proposed by NIA-AA working

"Този документ е създаден в рамките на проект „Remote Healthcare Service Provision“ с акроним „RemoteCARE“, Договор No B2.9a.06, който се осъществява с финансовата подкрепа на Програма за трансгранично сътрудничество „ИНТЕРРЕГ V-A ГЪРЦИЯ- БЪЛГАРИЯ 2014-2020“, съфинансирана от Европейския съюз чрез Европейския фонд за регионално развитие. Цялата отговорност за съдържанието на документа се носи от МБАЛ Югозападна болница ООД и при никакви обстоятелства не може да се счита, че този документ отразява официалното становище на Европейския съюз, Управляващия орган, Съвместния секретариат и участващите страни“

group (2011) and International Working Group (IWG) 2007, 2010 , and Annex of the DSM 5 criteria for light and pronounced neurocognitive violation . 1. Criteria for LCN as clinical and cognitive syndrome Availability on change in cognitive functions - must Yes there is evidence for change in cognitive functions on the patient compared to the previous one level . This one information can Yes be received from the patient , from a person who knows the patient well , or from experienced specialist , observer the patient . A violation in one or more cognitive areas - must Yes there is evidence for lower indicators in one or more cognitive spheres , such as the decrease is greater than everything expects for age and education qualification on the patient . If are available tracking ratings , then the decline in indicators over time on the weather must Yes be obvious . This one change can Yes everything observed in different cognitive areas including _ memory , executive functions , attention , language and visual-spatial functions . Violation in the episodic memory (i.e. , the ability Yes everything learn and yes everything stores the new one information) se observes most often at patients with LCN who as a result are progressing to dementia at Illness on Alzheimer's . Emphasizes everything the meaning on violations in the executive functions in the earliest stations on the demented process . Storage on independence in the functional ones abilities - Individuals with LCN often they have light problems at organization and implementation on complicated functional tasks which _ earlier are carried out , as for example the payment on accounts , preparation on food or shopping . These activities they can Yes take away more time , yes be less effective and yes everything they do more errors at the performance them than _ before this . Although that , individuals with LCN usually support his own independence in everyday life activities with minimal help or assistance . Missing on Dementia - Established cognitive changes must Yes be enough mild , for Yes there is no significantly violation in the social or the professional functioning . Must Yes everything emphasize that _ the diagnosis of LCN requires evidence for change at the individual individual , specified through the anamnesis or the trackers research . 2. Cognitive characteristics of the Neuropsychological Faculty of Medicine research is optimal tool for the objective assessment on the degree on the cognitive violation . The results from cognitive tests for persons with LCN are usually from 1 to 1.5 standard deviations under the average value for theirs age and education . At atypical clinical picture on Illness on Alzheimer's there is specific clinical and neuropsychological profiles , which too reflect LCN- Disease on Alzheimer's . Trackers neuropsychological research . They they can Yes give evidence for gradual cognitive decline _ functions and yes provide additional information for this that _ the patient there is "LCN- Disease on Alzheimer's " . 3. Etiology on the clinical syndrome of LCN in accordance with Disease on Alzheimer's For Yes be in force the main ones the clinical ones criteria for LCN, it is necessary Yes everything switch off others systemic or cerebral diseases that _ would they could Yes cause cognitive decline _ functions (vascular , traumatic , etc.). The goal on this one rating is yes everything increase the probability that the main thing disease is neurodegenerative disorder with characteristics corresponding on Illness on Alzheimer's . This one diagnostic strategy is similar on the one used at diagnosis of " dementia ." at Illness on Alzheimer's " . That can Yes includes search on manifestations for : (1) parkinsonism , incl prominent visual hallucinations and disturbance in the fast eyes movements in sleep , often monitored in 12 13 dementia with bodies on Left , (2) plural vascular risky factors and/ or availability on extensive cerebrovascular disease from the structural ones cerebral renderings , which is telling for vascular cognitively violation , (3)

manifest behaviorally or linguistic violations at the beginning on on the disease which can to be a scar of FTLD, or (4) many in a hurry progression on cognitive violations for weeks or months , usually typically for prions diseases , neoplasm or metabolic diseases .

Biomarkers measure two aspect on the disease : amyloid accumulation (via liquorice research and positive amyloid imaging) and neuronal damage (CSF study , lowered cerebral glucose metabolism and temporal / parietal atrophy). Newer ones research show that _ amyloid pathology can Yes precedes the neuronal impairment up to 20 years . Therefore , in the preclinical phase on Illness on Alzheimer's amyloid biomarkers like the liquor research and amyloid positronic emission tomography (PET) can Yes be useful . The diagnosis Easy cognitively violation at disease on Alzheimer's (LCN- Disease on Alzheimer's) has a large probability at availability of β - amyloid biomarker (PET or cerebrospinal fluid) and a biomarker for neuronally damage (CSF , FDG, MRI) With progression on the disease more informative are the biomarkers on the neuronal impairment .

We mention the main ones aspects on the diagnosis, because among the biomarkers , amyloid indicators they can Yes they have especially informative role at the risky ones persons for development on Illness on Alzheimer's and the prodromal Illness on Alzheimer's .

Recommends everything application on the inclusion criteria on biomarkers only for specialized demented opportunity centers _ for detailed neuropsychological research , neuroimaging and CSF research with relevant standardized methods . On practice most criteria are insensitive and different criteria they give different assessment on this who patient there is vascular dementia , or it's up a question for Illness on Alzheimer's . Vascular lesions are found at a lot patients with dementia , where them often everything discover only through routinely neuroimaging . From another country , the patients who are only with vascular pathology like reason on dementia are rare in many studies . Most of them patients they have mixed pathology , so that the patients with vascular lesions often they have manifested and for something else neurodegenerative illness . Vascular dementia , developing everything with Disease on Alzheimer's is common met , but the clean one vascular dementia is less common . Must Yes everything note that _ a lot positive patients _ rendering for vascular pathology do not have medical history for stroke which _ assumes high frequency on appearance of " silent " strokes . On the background on the considered to now , the proposal for the shift on the concept of " vascular dementia ” to “ vascular cognitively violation ” (SKN) has Prevention on the disease on Alzheimer's in the middle age can Yes everything performed by different ways . Official measures which _ are able _ Yes protection humanity from the disease , to today , no . Many resort to to alternative medicine , others looking for effective medicines .

Regarding efficiency on the modern ones medicines for prevention on the diseases , the expert arguments no disappear . At the Institute on Karolina (Sweden), the scientists they work on the creation on special vaccine . The main one his task is destruction on the protein that is the cause on the disease . In the future are planning Yes vaccinate people with a predisposition to asthma .

For Yes everything slow down the risk from development on the disease is necessary Yes everything is training the memory . You can too Yes you use drugs that _ increase the concentration . To today's date the most effective are :

1. Glycine ;
2. Piracetam ;

3. Vitrum ;
4. Tanakan .

These medicines they have positive effect on the level on attention _ Zoom in performance , improve the memory . Although this , no must Yes you resort to self-medication , for Yes no harm on the body . Take it medicines , after like talk to your a doctor .

The right one nutrition and healthy way on life are warranty for well-being . From ancient times the people are believed in the powerful strength on the alternative medicine for prevention on the disease on Alzheimer's :

- black black currant . Use it it two times daily ;
- infusion on sapwood lapacho. For 1 liter boiling water are enough two soupy spoons . Mix and leave for 15-20 minutes . Take it it everyone day ;
- Malpighi. He contains big quantity vitamin C. For Yes prevent the disease on Alzheimer's , you have to Yes consume two or three fruits on day .

The experts are skeptical regarding the alternative ones methods and recommend Yes everything turn over attention on diet , exercise and the brain training .

The neurologist Lawrence Kats says that _ without training the human brain everything atrophies like muscles . He can Yes works fully and the ability his Yes everything resists on the disease , but it is necessary Yes it we train .

The scientists offers list of many efficient and at the same time sorry exercises :

1. " Search on new ones ways ." The most important thing is to everything refuse from the usual ones roads and roads . Even for the ordinary ones walks are necessary Yes choose new ones routes . It is very important Yes changeable the situation , yes everything we strive to new ones impressions ;
2. - We change the hand . If the person is on the right hand , he must Yes performed known work with the left you are hand for known time . It's better to choose sorry tasks . For example , call everything on the door , open the lock , the button up ;
3. " Nov interior " . The exercise includes moving on objects on the interior on new ones places ;
4. " Conversation " . Must Yes find new ones answered on insignificant questions and as much as possible more Yes communicate with relatives by different topics .

The job on myself you are there is no Yes deserted . At regularly learning , memory and attention will everything improve significantly . For Yes no suffer from the disease on Advanced Alzheimer 's age , it is better to everything put down all efforts in advance , for Yes everything prevent development on senile dementia .

Leading role for occurrence on the disease everything appears the cholesterol He contributes for impairment on the nervous ones cells . The relationship on the disease with the way on nutrition is studied within _ on the project " North Karelia " . It has been established that the men who prefer meaty and fatty food , they have promoted levels on cholesterol – over 6.5 mmol /l and 3 times more often suffer from dementia .

The disease on Alzheimer's is an object on a few large-scale research carried out in different countries , as a result on who are received precious data . They prove that _ consumption on saturated fats doubles the risk from senile deafness occurring in presenile age age , and consumption on trans fats , even minimally dose , go triples . When at the same time everything accept saturated and trans fats , the risk from Alzheimer's jumps 9 times .

Martha Claire Morris from Chicago , author on series research , is categorical :

" Consumption on saturated and trans fats increases the risk from Alzheimer's at its best case at least 4 times . The patients on intermediate and more advanced age gradually they lose the memory si , the identity si , and finally life you are " . According to some data for _ the first ones manifestations on the disease is enough person Yes everything foods incorrect even only 2-3 years . Like prophylactic measure the specialists recommended in the menu Yes everything turn on more fish , olives , avocados , which take down the risk from development on senile feeble-mindedness . The clear one mind and the strong memory everything support with more foods , rich of Omega-3 fatty acids acids and vitamins A, C, D, E.

The limitation on the meat helps Yes everything avoid dementia On the disease on Alzheimer's in the world right now everything turns big attention , but the simplest way Yes everything avoid she is the right one nutrition , categorical are the experts . They recommend The Mediterranean diet , as well as the MIND diet , which according to research everything they show extremely effective . They advise Yes everything emphasizes on vegetable food , vegetable fats , nuts , fruits , leafy greens vegetables , salads . And of course Yes , yes everything eliminate from the menu trans fats , saturated fats , dairy and meat products . " No don't forget the principles on the healthy meal , then there is no Yes you forget everything the rest , " he jokes everything prof . Oleg Medvedev .

Thought Mode _ _

The " Thought " mode that has been announced for neuropectoral diet , unites in itself you are the advantages on The Mediterranean and DASH diets . At her no everything recommends consumption on Red meat , animal fat , cow butter , cream , cheese , cottage cheese , confectionery products , products with long term on fitness , some kinds bread , fried foods . The recommended ones foods that _ are decreasing the risk from development on Alzheimer's , according to the " Thought " diet are :

Chicken meat or fish - 2-3 times weekly 100-120 g each ; if it is not possible Yes everything turned off the red one meat from the menu , yes everything eats rarely even more little _

Beans and peas (at good tolerance) maybe everything eat 3-4 times weekly 150-200 g each in ready type - they are valuable source on vegetable proteins and vitamins ;

The vegetables must Yes are main part from the menu - can Yes everything accept everyone day up to 750 g raw vegetables or up to 400 g thermally processed ; Fruits - 500-750 g per day , they oppress the desire Yes everything eat something sweet and not harm on organism ;

Milk and dairy products products - only skimmed or low-fat , so as with them everything accept serious doses saturated fat , enough Yes accelerate the appearance on the disease on Alzheimer's ;
The dance like prevention

The dances on openly are popular entertainment in China , especially for pensioners . Dr. Luo Sissy chooses namely them as an " intermediary " , for Yes attracted the attention to this degenerative cerebral illness .

The first movement in his video is standing on one foot , which has been proven that protects from dementia . Dr. Luo recommends Yes everything stay in this one position at least 30 seconds , after which Yes everything repeat with the other leg _ This exercise followed _ from special movements for the hands .

Choline – potentially medicine for Alzheimer's

Now scientists from The center for research on neurodegenerative diseases to The Arizona one university they succeeded Yes find that _ the choline it works like agonist , yes no everything confused with antagonist , of the receptors of sigma-1 involved in pathogenesis on the disease on Alzheimer's , and decreases the symptoms on the disease .

In the new research was used water labyrinth , for Yes everything determine whether the choline at the mice with symptoms on the disease on Alzheimer's will improve the spatial one memory .

Choline everything determines like attractive candidate for prevention on Alzheimer 's compared to many others pharmaceutical preparations .

Food rich on vitamin B4

Choline everything contains in different nutritional products . Tall levels everything establish in the chicken black liver , in 100 grams - choline is 250 mg , eggs with yolk - 147 mg choline , wheat germs - only in 30 grams , the content on choline is 51 mg .

Evening , before Yes fall asleep , remember you are everything that _ you it happened _ from the moment in which you are got up . For convenience is better Yes hang up eyes , but in none case no fall asleep

Slowly as possible _ _ more detail , try everything Yes you are recall all smallest details . For example getting up from the bed , shoes on slippers , going to the bathroom , washing on the teeth , what color is the brush , what you put , what you ate for breakfast , where you went etc. _ It needs to be slow Yes everything arranges everything that in the mind .

This exercise is training memory , concentration , awareness and order the neural network .

Except this , for Yes improve the nervous one system , it is recommended to you listen classic music , the sounds on nature , ethnic tunes and jazz . The scientists think that _ listening on music is almost the main one way for improvement on thinking , they recommend daily Yes you listen tunes , sometimes Yes you change the repertoire .

II Institutional framework for disease control

The institutional framework for the fight against Alzheimer's disease includes different actors responsible for all aspects of the problem. Besides the purely medical aspect, the disease also has a

social and ethical aspect, which should be adequately addressed. The main components of the overall institutional framework include:

1. The specialized and non-specialized pre-hospital help .
2. Hospitals neurological departments , university clinics and national centers .
3. Ministry on healthcare .
4. NHSOC.
5. Non-governmental organizations .
6. Local authorities and local communities

1. The specialized and non-specialized pre-hospital help .

With the specialist Neurologist in pre- hospital and hospital settings conditions is the main one figure in the interdisciplinary team at diagnostic and therapeutic process in the mild * and moderate ** stage on Alzheimer's , as well as in pre-dementia phase . The neurologist works together with a psychologist or qualified doctor _ by neuropsychology . The presence on a psychiatrist is necessary only for counseling on the mentally ill violations . The neurologist directs the patient for diagnostic clarification and therapy to specialized units , for homemade treatment or to hospices with detailed epicrisis and opinion for Further treatment . * cure stage on dementia – 20-26 points by MMSE, ** moderate stage on dementia - 12-20 points by MMSE. pre-eminent phase - 26-30 points by MMSE. The diagnostic process everything performed in clinics by neurology , specialized for diagnosis and treatment on demented states , where there is conditions for conducting on detailed neuropsychological research , as well as of standardized CSF and neuroimaging research accordingly the new ones criteria . The national consensus everything founded on the principle that at the absence on high qualified ambulatory unit , placement on diagnosis and preparation on optimal plan for treatment require mandatory short-term (3-5 days) hospitalization and conduct on specific research . The national consensus covers the road on the patient from the first meeting with general the practitioner doctor (OPL) and the neurologist from pre- hospital and hospital help to the placement on the diagnosis , formulation on the treatment strategy and its adequately conducting , as well as conducting on curative , prophylactic and rehabilitative events after the writing his from the hospital establishment . They follow are :

- chronology on cognitive violations and manner on progression on symptoms ;
- ability changes _ on the face Yes performs the everyday ones you are activities (according to the previous ones his skills and habits):
- yes performs professional and household activities , yes everything handles finances _ you are , yes everything orientation at the use on public transport , yes shopping , yes uses the modern ones technically funds etc. _ _

Neuropsychological research via :

- the formal ones rocks for common cognitive evaluation ;

- short batteries for research on cognitive spheres included in the criteria for diagnosis on dementia (memory , speech , praxis , gnosis , executive functions);
- detailed neuropsychological status .

In short , upright in front of patient with history for cognitive deficiency , the clinician must with help on neuropsychological tests and scales carefully Yes judge the type and degree on the cognitive violation and reflection his on the everyday ones activities . While application and interpretation on specific psychometric methodologies for subtle judgement on the type and degree on cognitive deficit requires special preparation , it neurologists from the health department network would they could after short training Yes apply the following short scales : 1) Formal rocks for common cognitive assessment , such as Mini Mental State Examination (MMSE) (Folstein et al ., 1975) or E-SAND (Fabrigoule et al ., 1998), Bulgarian validation (Raycheva et al ., 2013). 2) Rocks for assessment and documentation on coping with the everyday activities , such as the Blessed Dementia Scale (BDS) (Blessed et al ., 1968) or the Instrumental Activities of Daily Living (IADL) (Lawton and Brody, 1969). 3) Rocks for assessment on depression like the one proposed by the Consortium to Establish a Registry for Alzheimer's Disease (CERAD, 1994). At everyone patient with suspicious dementia everything carry out somatic and neurological review , some laboratory tests (PKK, blood sugar , serum electrolytes , hepatic enzymes , creatinine) , conventional neuroimaging examination (CT or MRI), ECG. At necessity everything conduct additional laboratory tests (serum level of B12 and folate acid , TSH, tests for HIV, VDRL and Borrelia, etc.) , consultation with a psychiatrist , research on liquor , functional neuroimaging examination (SPECT, FDG-PET), Doppler sonography on highways arteries on the head , EEG, genetic research . The cognitive deficit no must Yes everything explains from something else illness (e.g. large _ depressed episode , schizophrenia) Mild neurocognitive disorder / disorder . That is availability on cure cognitive decline compared to previous _ success rate in one or more areas (complex attention , executive functions , memory and learning , language , visuomotor functions or socially knowledge) op basis of - the opinion on himself individual , of his close or on clinician , - documented deficit through neuropsychological study (between 1 and 2 SD sub the norm for the age) The cognitive deficit is not enough , for Yes influenced the independent functioning (e.g. the complex instrumental activities like payment on accounts , reception on medicines are reserved) , but require bigger ones effort and compensatory strategies .

2. The hospital ones neurological departments , university clinics and national centers .

In these specialized centers everything assumes the receipt on more complex and specialized help and diagnostics . Like already it was said , the specialist neurologist works in a team with specialists from others disciplines such as the goal is to be isolated the factors responsible for development on the disease . Basic issue found in Bulgaria is that the capacity on these centers is limited , and in the same time are also uneven scattered on the territory with a concentration in the large cities . In elementary school phase of the manifestation of the symptoms, in this regard, the role of the patient's relatives and

personal physicians is very important, to identify the problem and direct attention to it in a timely manner.

In 2018, the Government approved the National Health Card of Bulgaria. Through it, the needs of the population for accessible outpatient and hospital medical care are determined and planned on a territorial basis and the national health policy is implemented.

The main goal of the National Health Card is to adapt the structure of the health network to the needs of the population, guaranteeing every Bulgarian citizen equal access to health services. With the Map, the need for doctors, dentists and specialists from the professional field of "Health care" in outpatient medical care has been determined. The needs for beds for hospital treatment, medical activities by types and levels of competence for all areas, as well as the necessary high-tech medical equipment and high-tech methods for diagnosis and treatment are also determined.

In this one connection the territorial distribution on the resources by different directions it 's already done and taken care of on personal doctors all the time Yes direct the patients at doubt for availability on symptoms on the disease on Alzheimer's to competent institutions for conducting on more complex research and treatment .

3. Ministry on healthcare .

The Ministry on healthcare on Republic Bulgaria is responsible for the conduct on the national one policy in the sector on healthcare in the country . In this one connection MoH develops strategies , plans and programs . To the moment there is developed " Project on The national health strategy 2030", which coming up Yes be accepted and on the base on him Yes be realized and separate programs . At the same time to the moment already there is Decision No. 388 of April 23 , 2021 for acceptance on National Strategy for mentally health on the citizens on Republic Bulgaria 2021 - 2030. To this strategy has developed and entered into force and " Plan for action to The National Strategy for mentally health on the citizens on Republic Bulgaria 2021 - 2030" However, in the Strategy itself everything points out the staffing problem engaged in the mental health on population – " The population on Bulgaria is about 7 million . The number on psychiatrists is about 500, too unevenly distributed , concentrated mostly around the cities with medical

universities . Indicative this means approximately 1 psychiatrist at 15 thousand _ souls

population . From these psychiatrists nearly 80% work in psychiatric facilities hospitals , and 20% of them in the outpatient clinic help . The number on children's recognized psychiatrists _ specialty by children psychiatry in the country is only 22 at extremely unevenly territorially distribution . The number on

concluded contract with the NHIF is about 400, as 25% of them are on the territory on Sofia (NHOC data , 2018). These indicators put Bulgaria on last place in Europe ."

4. NHSOC.

The main goal of the National Health Insurance Fund is to ensure and guarantee free and equal access of insured persons to medical care - through a package of health activities defined in terms of type, scope and volume, as well as free choice of a contractor who has entered into a contract with a regional health insurance fund.

With its activities, the National Health Insurance Fund aims to improve the quality of life of Bulgarian citizens by regulating and increasing the social, health and economic efficiency of health care costs; improving the quality of the services provided and equality in their use; introduction of mechanisms for decent payment of medical specialists, as well as a positive change in the relationship between doctor and patient.

The NHIF is concerned with Alzheimer's drugs, which are partially reimbursed by Kasaat, and protocols are required. They are issued by the specialized neurology commissions in the designated medical facilities throughout the country.

5. Non-governmental organizations .

There are not many non-governmental organizations in Bulgaria that are related to prevention and support activities for Alzheimer's patients. As a leading such organization, the Civic Association "Alzheimer Bulgaria" can be singled out. It is a member of Alzheimer Europe and Eurocarers. GS "Alzheimer-Bulgaria" was established at the end of 2003 and deals with "preventive, organizational and coordinating activities related to the fight against Alzheimer's disease and similar diseases, informative and other activities for the implementation of assistance for Alzheimer's patients and similar diseases and their families'. The association has 9 branches in the country, where consultations are held for interested parties with the aim of helping the sick and their relatives. With its active activity, the Citizen Association "Alzheimer Bulgaria" contributes to bringing the problems of Alzheimer's patients into the focus of public interest, as well as through donation campaigns and publicity to educate the general public on the subject. In general, the Association can be cited as an example of a working model of an NGO that addresses a problem related to a specific disease. This can be used to expand the Association's network by including volunteers and/or other partner NGOs.

6. Local authorities and local communities

Local authorities and local communities do not have specialized functions to support Alzheimer's patients and their relatives. However, in the "NATIONAL STRATEGY FOR MENTAL HEALTH OF THE CITIZENS OF THE REPUBLIC OF BULGARIA 2021 - 2030" it is considered with social participation. It stands out like a key element in education on the civil society, his awareness for the possible ones Limits on the healing one system and the negatives consequences from given Professionally behavior. The process on training namely therefore must Yes includes themselves _ professionals - psychiatrists, psychologists, social workers workers, nursing staff, etc. _

Community Mental Health Centers may be considered as an option for support. Like main unit in the community CHP system combines in itself you are medical activities, psychosocial rehabilitation, urgent psychiatry, domestic care, mobile crisis teams _ interventions, early discovery on prodromes on mental disorders, active wanted and pursued on the cases. The center carries out connections with social, educational and human rights services, general practitioners doctors and specialists in the outpatient department help, creates bases data, performs promotional and prophylactic activities, provides mental health information for the citizens.

One aspect that is still underdeveloped in Bulgaria is related to the possibility of partnership between the NGO sector and local authorities in order to achieve maximum efficiency in solving community problems. For example, the combination of volunteers and provided conditions (building stock, consumables, etc.) for the functioning of various support centers (not only in the form of a health center) is still an unrealized opportunity.

III. Summary

Studies in the field on Alzheimer's disease acquire through the last ones years extremely meaning, due to the increase on the duration on life on the people. The big one is indisputable socio-economic and medical significance on diagnosis, treatment and care for demented the sick in ours country like quickly aging nation. The dementia affects 5.4% of the people over 65 years old his appearance everything increases with age. The number on those affected people will everything doubles on every 20 years up to 115 million by 2040 according to the data of Alzheimer Disease International (ADI) World Report Alzheimer 2010. In the European union more of 160 million souls are on age over 60 years. The rude one assessment for distribution on dementia is about 6.2%, which means almost 9,950,000 people they have any form on dementia. Almost 14 million Europeans everything expects Yes they have dementia in 2030. Recently in Bulgaria it was conducted study having _ for purpose Yes determine distribution and types dementia, as well as mild cognitively violation at persons over 65. Those established percentages are comparable to those in others countries - 7.2% patients with Disease on Alzheimer's, 6.7 are with LCN, like

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Illness on Alzheimer's is the most common type dementia (3.1%), followed from SD (2.0%). The exceptional medico-social significance on this devastating human intellect state is a result as from the tall one morbidity and progressive loss on autonomy on the sick , as well as from the specifics on the necessary care , demanding exceptional health , moral and financial costs everything early and adequately diagnosis and treatment on already manifested cognitive disorders and demented states

- Postponement and prevention on the heavy ones stages on dementia related to full loss on autonomy on the sick
- Early and adequate diagnosis on the persons with LCN and elevated risk for development on demented syndrome
- Significant lowering on morbidity , and from there and on the huge ones medico-social expenses which _ requires the care on patients with manifested dementia on Alzheimer • Decrease on the quantity medication and expensive the cost hospital treatment at this one contingent sick
- Assisting on neurologists from pre-hospital help for placing on early and punctual diagnosis , conduct on correct treatment and performance on effective prevention on dementia in its main forms ;
- Restriction on the quantity used medications at the sick and improving the quality on life on these sick

At the same time, the social aspect of the disease covers not only the patients themselves, but also their relatives and the need to provide adequate care in the community.

No can Yes no everything the model also mentioned on the green ones farms in Scandinavia countries for example, which can Yes everything uses like source on good ones practices , some from who are also applicable in context on the traditional ones homes . A key factor for the tall ones levels on activity and engagement with activities is itself environment which _ provides no only rich choice from meaningful activities , including on open but also protected _ space in which the sick they can Yes everything move freely and yes they have the feeling for autonomy . Homes for living rooms cares they can Yes achieved this with protected yard space which _ too offers variety from activities , including gardening , care for yard and communication with domestics favorites . People with dementia too so they can Yes be invited Yes participate in household activities in the Scandinavian countries e.g. or others productive activities such as the main thing is yes they have choice in what activity Yes participate . Another important aspect is encouragement on interpersonal communication between people with dementia at the group ones activities . Here key role plays the man who leads the corresponding occupation , regardless whether there is some kind healthy education or is it simple competent in the relevant activity . No on last place is good Yes everything encourages the physical activity – as with routine gymnastics , as well as meaningful activities which _ assume any form on physical loading . In the Netherlands the traditional ones homes for cares already are started Yes apply similar models inspired _ from the farms for care . Potential problem with similar species decentralized services is communication

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between the municipality and the suppliers on care . In the Netherlands care for people with dementia recently are responsibility on the locals municipalities which , from _ his own country , provide financing on the private one sector , but everything more are missing good developed mechanisms for communication between both the sector . As a result on this the municipalities no are enough aware with the happening are in the separate farms for care , and the owners on the farms no are good informed regarding expectations on the municipality . The situation gradually everything improves with development on more efficient mechanisms for communication and control from country on the municipality .

The topic for insurance on effective services guaranteeing _ good life and dignity on those affected from Illness on Alzheimer 's is also related to recommendations and necessity from changes in legislation . They are in direction on insurance on early diagnosis , conducting on struggle with stigma and necessity from campaigns for Better awareness , good sustained strategy for development on care and services for such persons , mandatory preparation on shots for working with persons on different educationally level in different areas . Like key approach everything outlines the need from separate services and standards for care for people with dementia , coordination between the different ones laws and regulations acts having _ attitude to this one group and between the institutions , with a goal the insurance on coherence , and assurance on efficient care for better life .