# Pharmacists: Key players in patient education about depression

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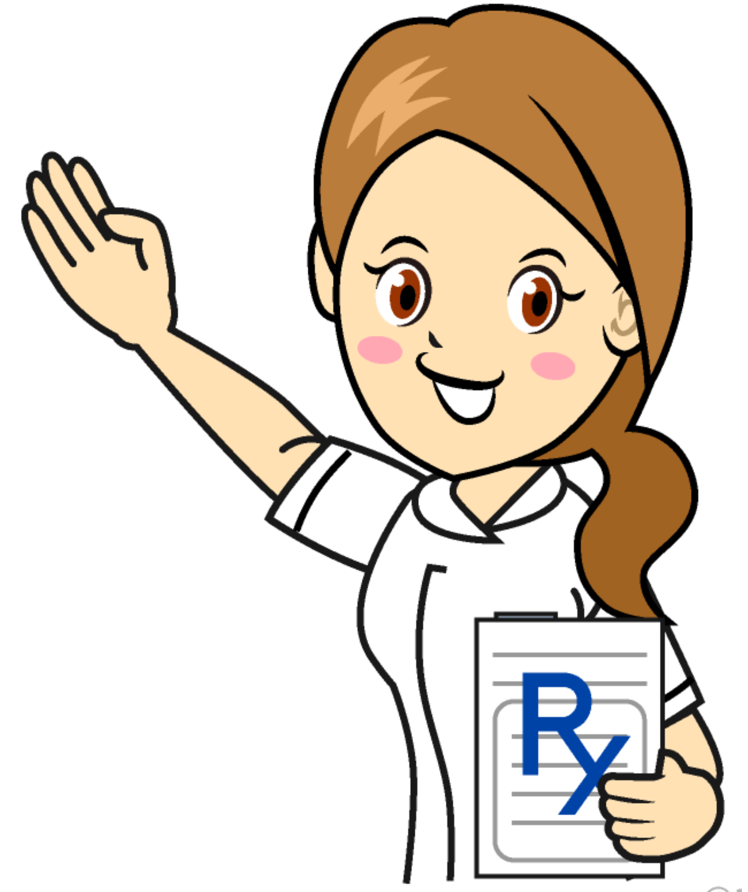
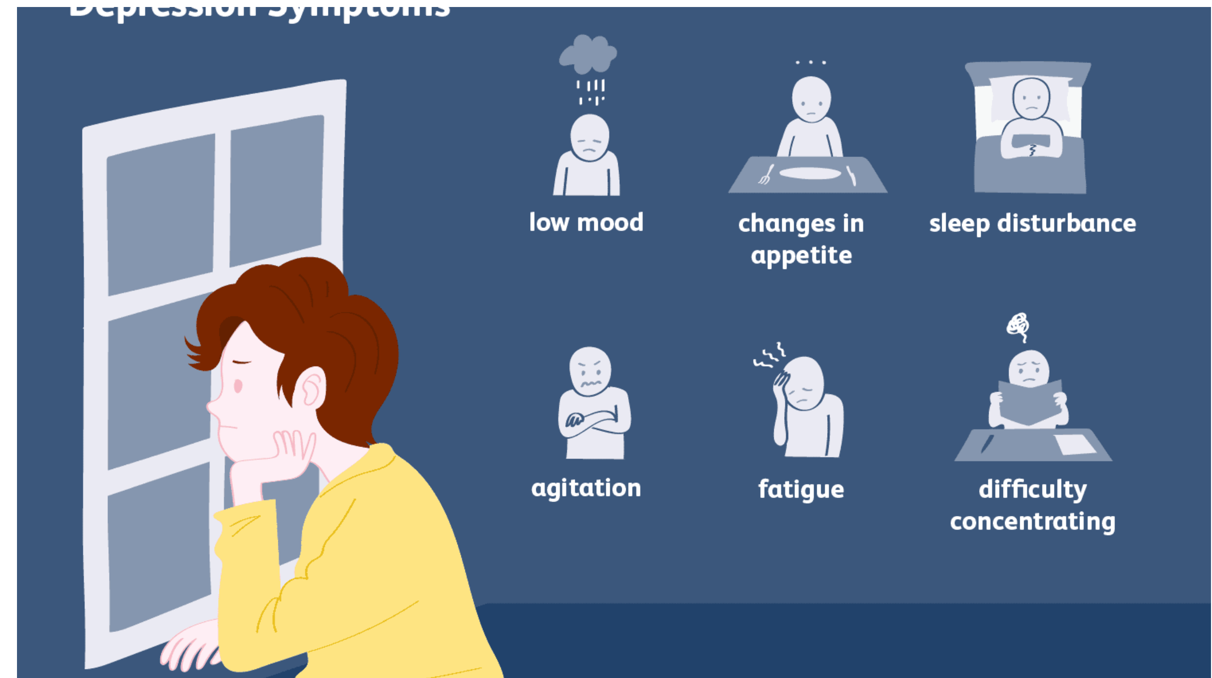
# Main responsibilities of the pharmacists

- Pharmaceutical Care Network Europe (PCNE) preformulated the definition "Pharmaceutical Care is the pharmacist's contribution to the care of individuals in order to optimize medicines use and improve health outcomes".
  1. to ensure that all medications are appropriate, effective, and safe for a particular patient.
  2. to identify, solve, and prevent various drug-related problems.



- Depression is a common psychiatric illness, which is associated with several specific symptoms
- Among all mental disorders, depression is related to the highest risk of suicide, followed by schizophrenia and alcohol abuse
- Depression, at its worst, may result in suicidal tendencies or suicide and that suicide is responsible for an estimated 800,000 deaths worldwide each year



# Depressions Statistics Everyone Should Know

**300 million people** worldwide experience depression (WHO, 2017)

**3.1 million people** between ages 12 and 17 in the U.S. have experienced at least one major depressive episode in the past year

**8.7%** of women have depression
**5.3%** of men have depression

Median age of onset: 32.5 years old

Suicide is the second leading cause of death among people ages 10–34

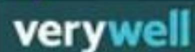
**Resources:**

National Alliance on Mental Illness (NAMI)

Substance Abuse and Mental Health Services Administration (SAMHSA) National Helpline: 1-800-662-4357

Nearly **50%** of those diagnosed with depression also have an anxiety disorder

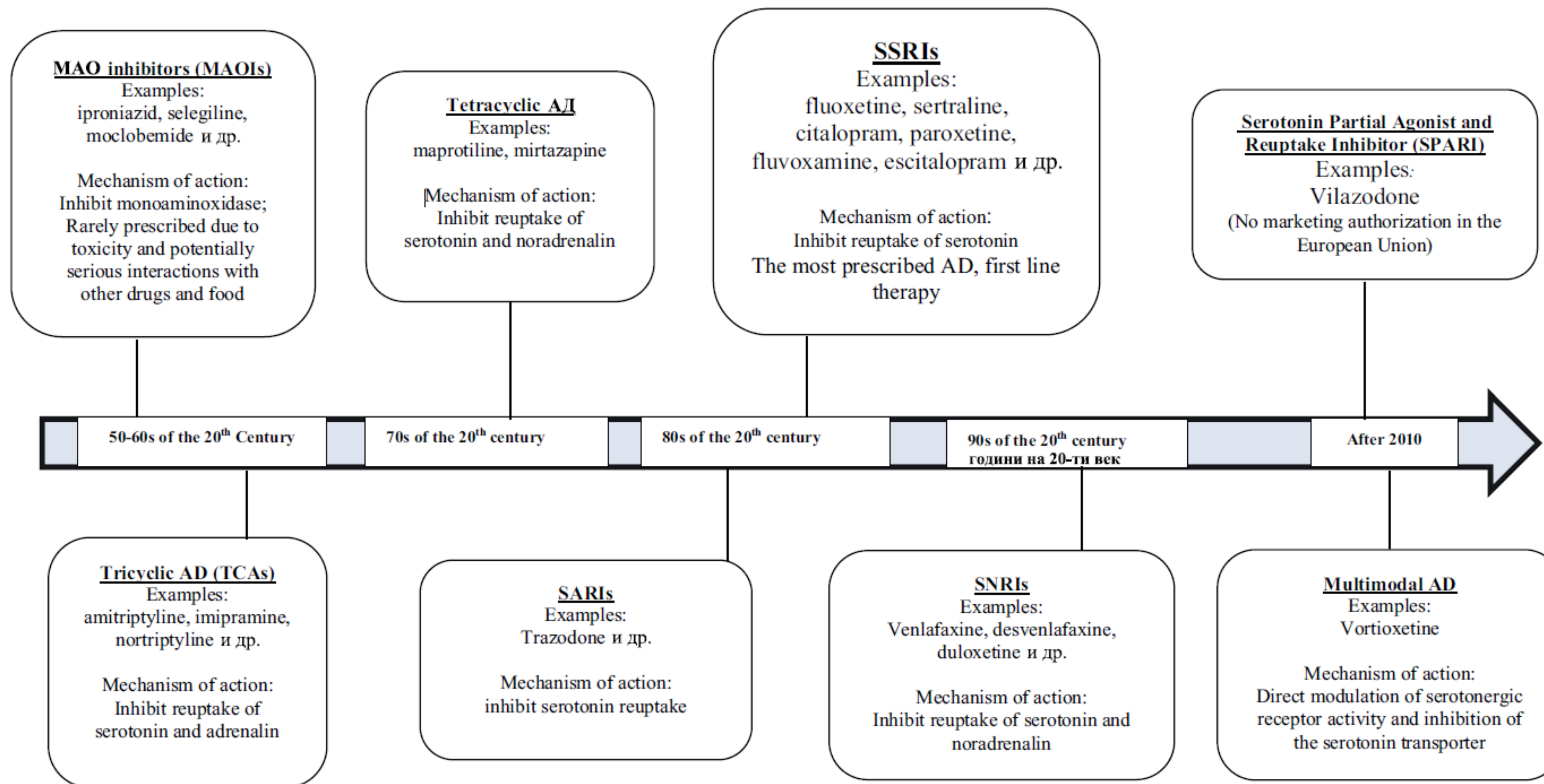
Depression is very treatable but **35% of adults** receive none

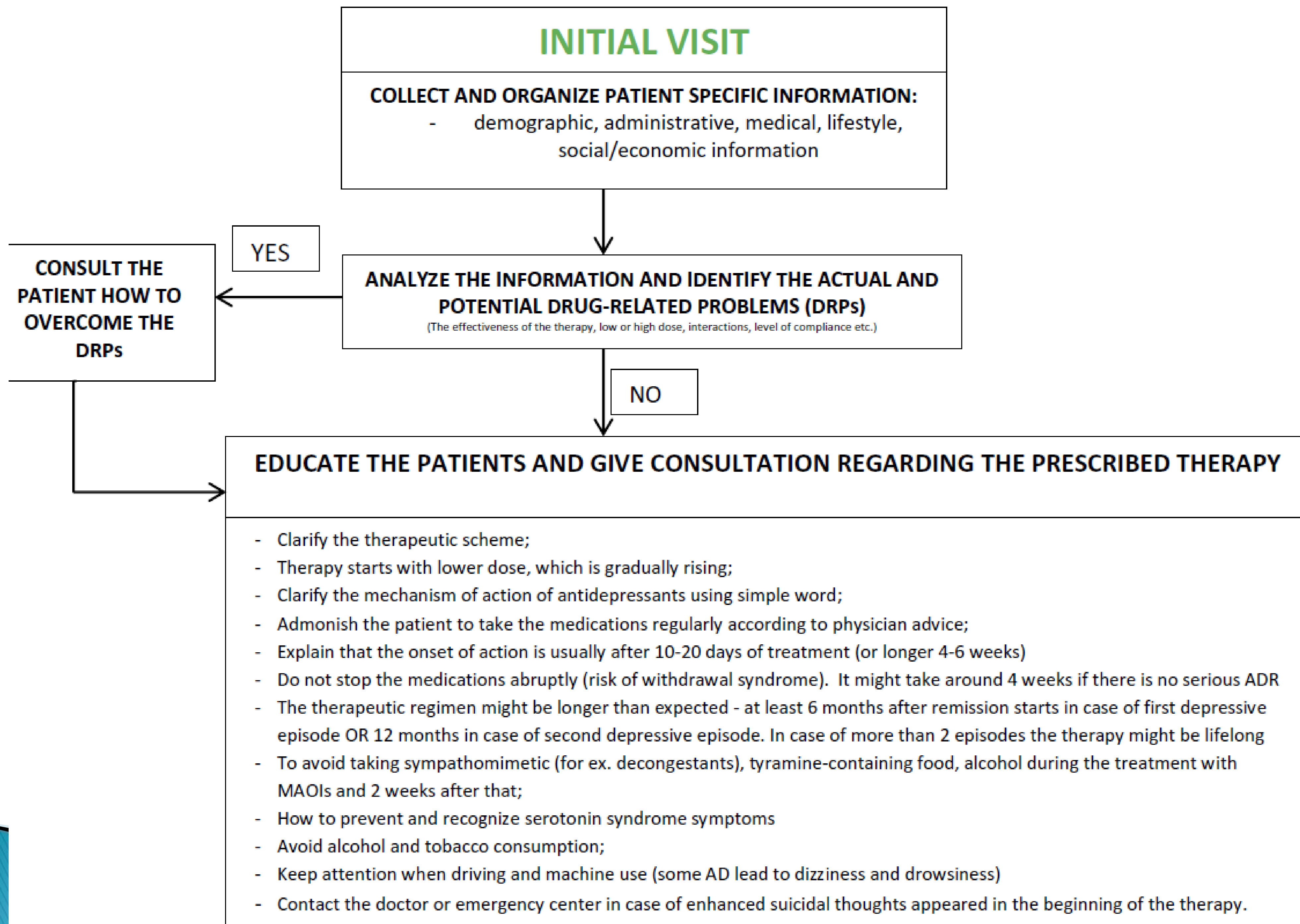


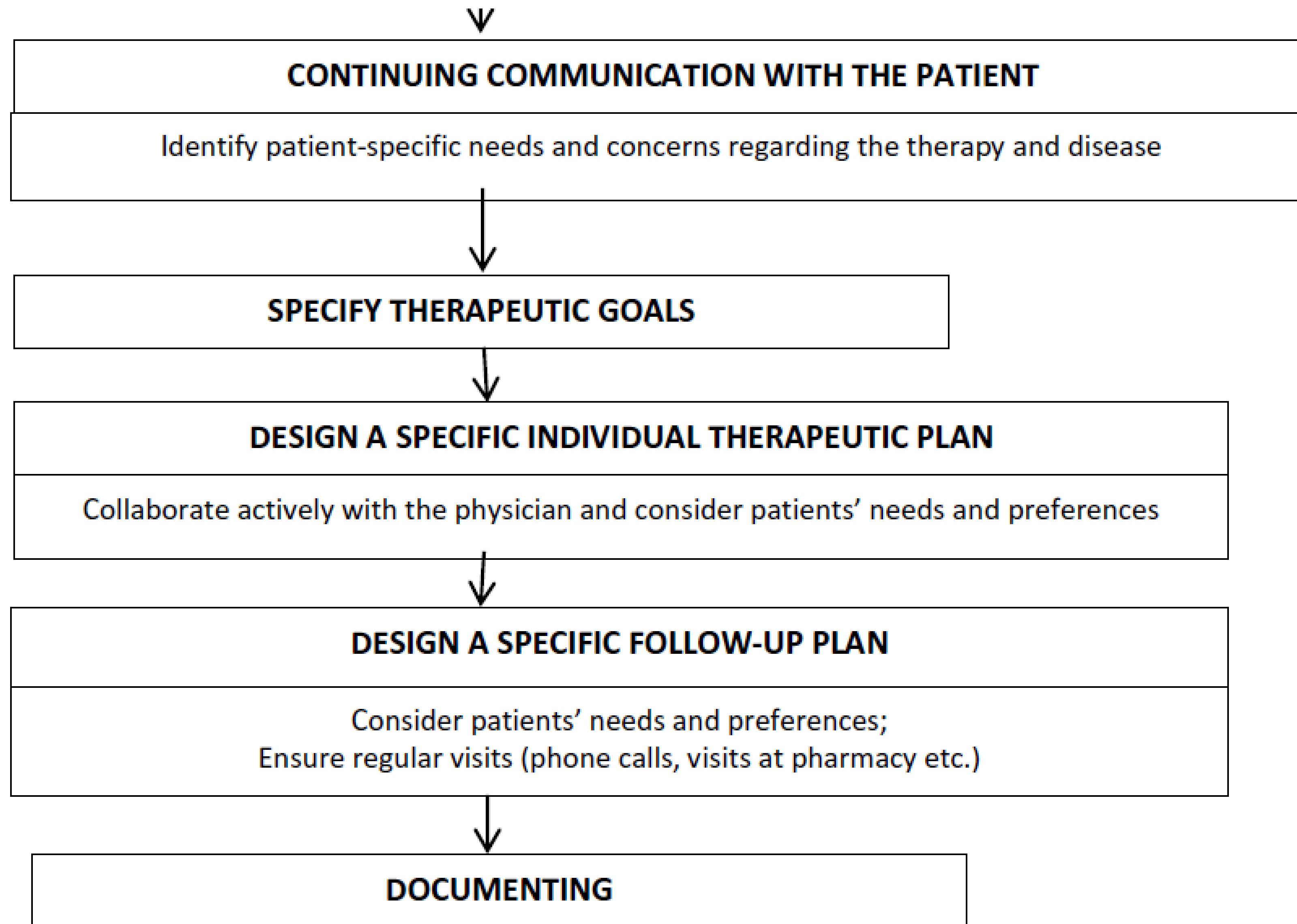

Verywell / Alison Czinkota

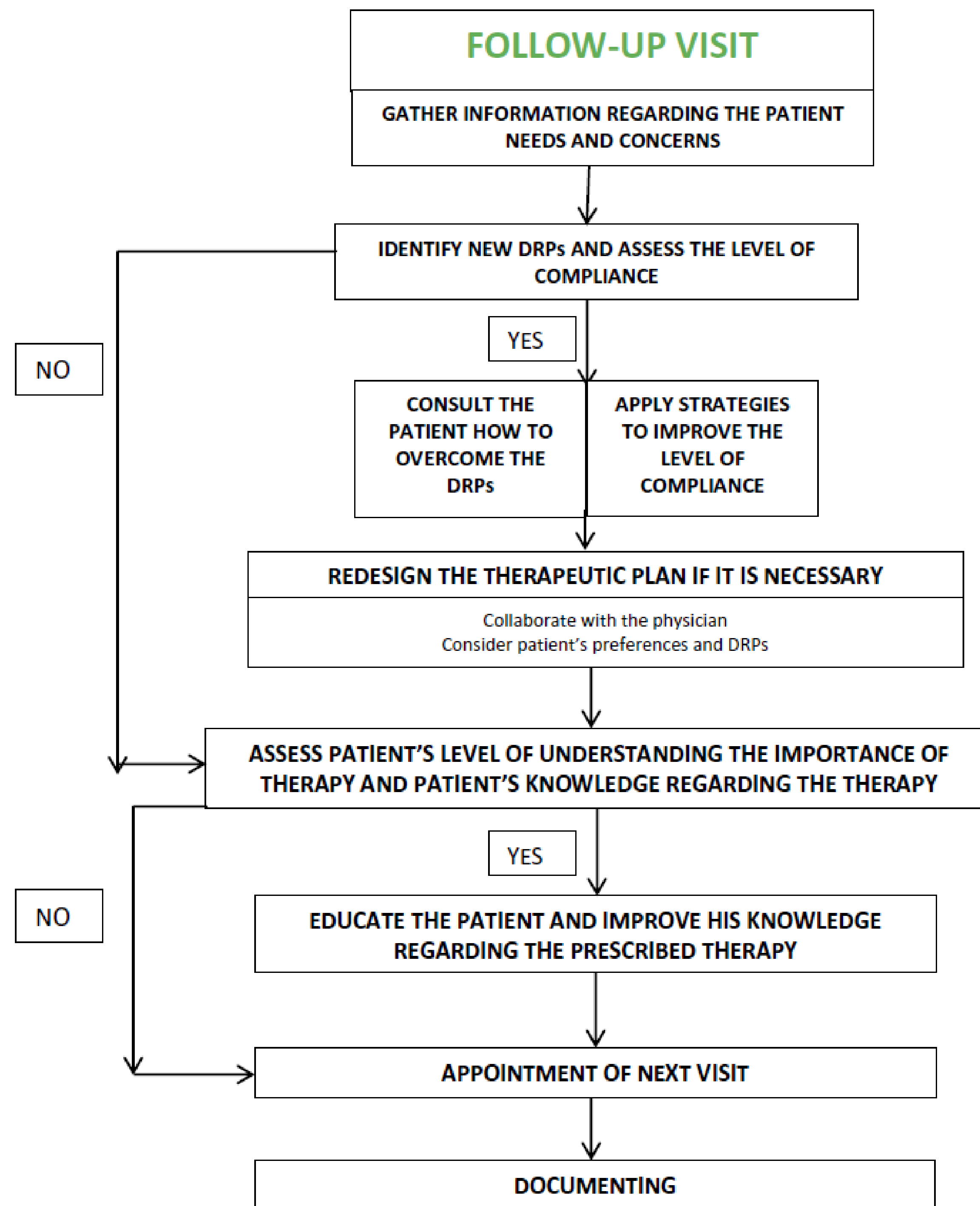
# Pharmacotherapy principles for depression

- The goal of treatment is achieving remission and full recovery of the patient's social functioning




INITIAL VISIT
COLLECT AND ORGANIZE PATIENT SPECIFIC INFORMATION:
- demographic, administrative, medical, lifestyle, social/economic information
ANALYZE THE INFORMATION AND IDENTIFY THE ACTUAL AND POTENTIAL DRUG-RELATED PROBLEMS (DRPs)
(The effectiveness of the therapy, low or high dose, interactions, level of compliance etc.)
YES
CONSULT THE PATIENT HOW TO OVERCOME THE DRPs
NO
EDUCATE THE PATIENTS AND GIVE CONSULTATION REGARDING THE PRESCRIBED THERAPY
- Clarify the therapeutic scheme;
- Therapy starts with lower dose, which is gradually rising;
- Clarify the mechanism of action of antidepressants using simple word;
- Admonish the patient to take the medications regularly according to physician advice;
- Explain that the onset of action is usually after 10-20 days of treatment (or longer 4-6 weeks)
- Do not stop the medications abruptly (risk of withdrawal syndrome). It might take around 4 weeks if there is no serious ADR
- The therapeutic regimen might be longer than expected - at least 6 months after remission starts in case of first depressive episode OR 12 months in case of second depressive episode. In case of more than 2 episodes the therapy might be lifelong
- To avoid taking sympathomimetic (for ex. decongestants), tyramine-containing food, alcohol during the treatment with MAOIs and 2 weeks after that;
- How to prevent and recognize serotonin syndrome symptoms
- Avoid alcohol and tobacco consumption;
- Keep attention when driving and machine use (some AD lead to dizziness and drowsiness)
- Contact the doctor or emergency center in case of enhanced suicidal thoughts appeared in the beginning of the therapy.


CONTINUING COMMUNICATION WITH THE PATIENT
Identify patient-specific needs and concerns regarding the therapy and disease
SPECIFY THERAPEUTIC GOALS
DESIGN A SPECIFIC INDIVIDUAL THERAPEUTIC PLAN
Collaborate actively with the physician and consider patients' needs and preferences
DESIGN A SPECIFIC FOLLOW-UP PLAN
Consider patients' needs and preferences;
Ensure regular visits (phone calls, visits at pharmacy etc.)
DOCUMENTING


FOLLOW-UP VISIT
GATHER INFORMATION REGARDING THE PATIENT NEEDS AND CONCERNS
IDENTIFY NEW DRPs AND ASSESS THE LEVEL OF COMPLIANCE
NO
YES
CONSULT THE PATIENT HOW TO OVERCOME THE DRPs
APPLY STRATEGIES TO IMPROVE THE LEVEL OF COMPLIANCE
REDESIGN THE THERAPEUTIC PLAN IF IT IS NECESSARY
Collaborate with the physician
Consider patient's preferences and DRPs
ASSESS PATIENT'S LEVEL OF UNDERSTANDING THE IMPORTANCE OF THERAPY AND PATIENT'S KNOWLEDGE REGARDING THE THERAPY
NO
YES
EDUCATE THE PATIENT AND IMPROVE HIS KNOWLEDGE REGARDING THE PRESCRIBED THERAPY
APPOINTMENT OF NEXT VISIT
DOCUMENTING

# Identifying people struggling with their mental health

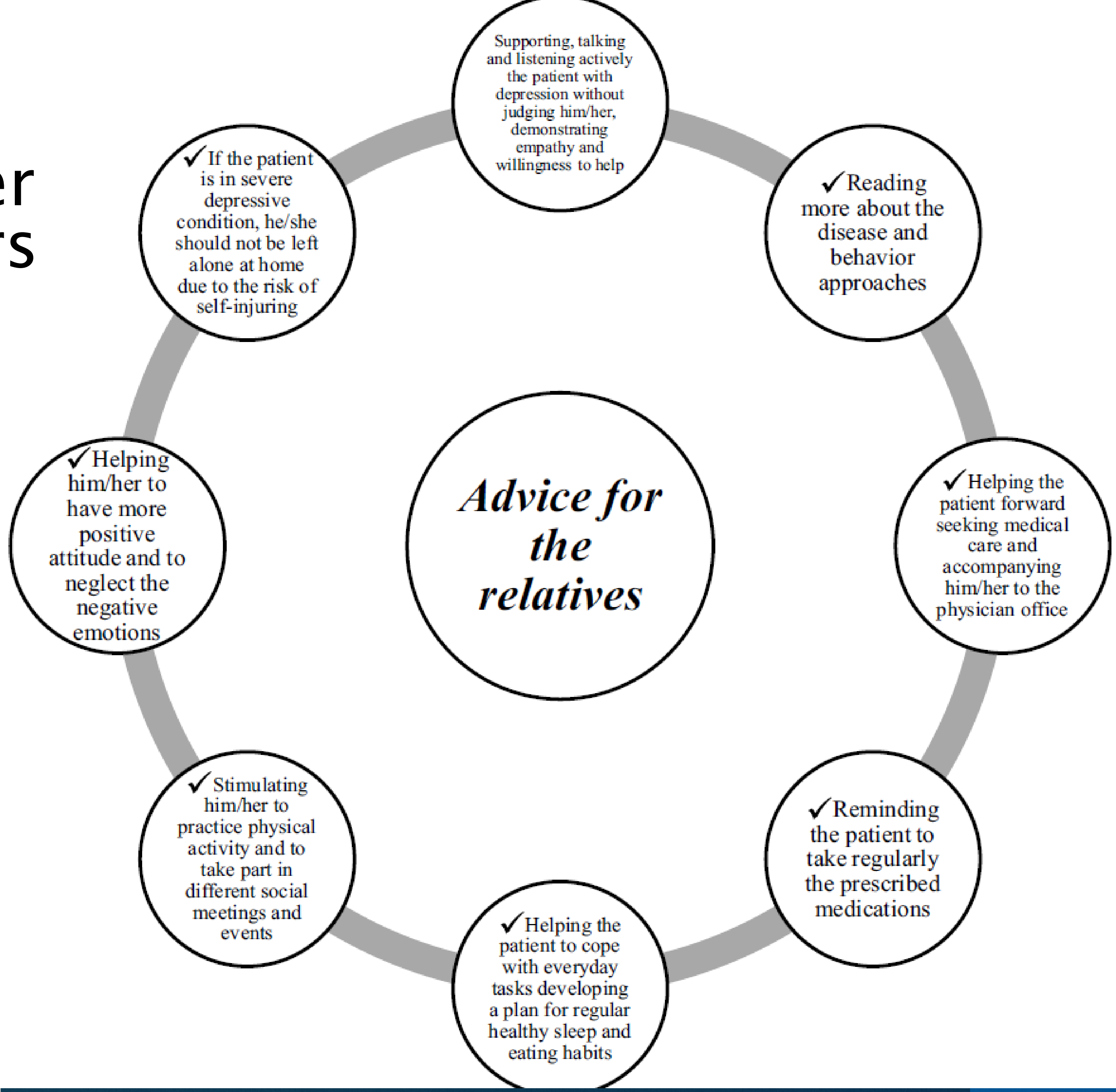
- Pharmacists are well placed to identify changes in behavior and early signs of mental health problems including anxiety, depression, post-traumatic stress disorder, and substance or alcohol abuse.
- Patient Health Questionnaire-2 (PHQ-2) and PHQ-9 are the preferred screening tools in primary-care and community settings, as they are short, accurate, and simple to administer. These assessment tools are available online
- Kondova et al identified that 70% of all patients screened in a community pharmacy setting have positive results of PHQ-2 test, and 55% of them had indications of mild-to-moderate depression.

# Communication with the Patients and Their Family Members/Caregivers

- Communication with patients with mental problems presents a challenge for every pharmacist.
- The pharmacist should play the dominant role during the conversation, applying appropriate voice tone, using simple and short sentences and body language without discussing several issues simultaneously – a focus should be made on a specific problem through a variety of technical and non-technical skills.
- The consulting pharmacist should pay attention to and adapt the discussion towards patient's difficulties related to verbal speech and memorization.
- Avoiding confusing questions and interrupting patients while he/she is speaking, listening actively, demonstrating empathy and using the most appropriate body language (eye contact, smile, understanding look, etc.)

| Question | Purpose |
| --- | --- |
| What medications do you take in what dose and when do you take them? | • The purpose is to understand whether the patient understands the prescribed therapy and administrates it properly |
| How long do you take these medications according to the current dosage regimen? When was the last time your therapy was changed? | • The purpose is to clarify the effectiveness and appropriateness of the therapeutic regimen |
| How do you feel after taking your medication(s)? | • The purpose is to clarify the effectiveness and appropriateness of the therapeutic regimen |
| Do you consider stopping abruptly the medications for depression? Do you think interrupting the therapy suddenly is appropriate? | • In this way the pharmacist can identify the level of patient's knowl-edge regarding the medications and therapeutic regimen |
| Do you consult with a pharmacist when buying OTC medicinal products? | • To identify timely drug-related problems |
| Would you like to ask some questions regarding the medications you take? | • To assess the level of knowledge and to stimulate the patient to be an active partner in the process |
| Have you ever had suicidal thoughts? | • To assess the severity of the disease |
| | • To assess the history of condition |
| | • To indicate worsening of the condition |
| Do you see your psychiatrist regularly? | • To identify the level of adherence to therapy |
| | • To identify the level of patient's involvement in the therapeutic process |

# Education of the Patient and His / Her Relatives/ Caregivers



# Non-Pharmacological Treatment

- Physical activity – 3-5 times per week,20-30 minute nature walks, etc.; light therapy – in case of seasonal depressive disorders
- Music therapy; acupuncture
- Food supplements (omega 3 oils)
- Stress management practicing yoga, meditation; healthy eating and sleeping habits; cognitive bibliotherapy

# Assuring Effective, Safe, and Appropriate Pharmacological Treatment

- Explanation of the therapeutic scheme, the mechanism of action of antidepressant (AD), avoiding complex medical words.
- Clarification that the onset of action of the prescribed AD is usually after 10-20 days (or longer: 4-6 weeks) and the therapy is continuous (2-6 months) depending on the severity of the disease.
- The initial dose is lower and it increases gradually.
- The patient must adhere to the therapeutic scheme as long as it is prescribed.
- The therapy must not be stopped suddenly – a period of 2-3 weeks is required.

- Even if the symptoms relieve the therapy must be continued and not stopped without the physician's recommendation due to the risk of withdrawal syndrome (irritability, headache, insomnia palpitations, sweating, and others lasting several days).
- Regular monitoring should be provided to every patient with depression in order for suicidal thoughts to be identified in a timely manner.
- Depressive symptoms are assessed every week or every other week. So, the pharmacist should remind the patient to consult with his/her physician regularly.

# Identification and Prevention of Drug-Related Problems

- serious drug-related problems (DRPs) could be identified or prevented, and specific interventions for the prevention and overcoming of the revealed DRPs could be recommended

| | Group of DRPs | Examples |
|---|---|---|
| Related to prescribing | Drug selection | Inappropriate drug; contraindications; duplication of drugs; too many drugs for one indication, etc. |
| | Drug form | Inappropriate drug form |
| | Dose selection | Dose too low or too high; wrong instructions for dosing, etc. |
| | Treatment duration | Too short or too long |
| Related to dispensing | Dispensing | No availability of the drug; no provision of the required information; wrong drug, wrong instructions, etc. |
| Related to drug use | Drug use process (administered by the health specialist or by the patient) | Inappropriate time dosing; patient abuses drug; takes too high or too low dose; wrong way of administration; inability to use the drug correctly, etc. |

| Medication (INN) | ADRs | Interactions |
|---|---|---|
| Amitriptyline | Arrhythmias, heart arrest, photo dermatitis, constipation, dryness in mouth, sexual dysfunctions | +Clonidine ≤ hypertonic crisis; +MAO inhibitors ≤ high blood pressure, hyperthermia, convulsion |
| Citalopram Escitalopram Fluoxetine Fluvoxamine Paroxetine Sertraline | Nausea, vomiting, insomnia, dryness in mouth, headache, hypotension, tremor, etc. | +MAO inhib.; +serotoninergic medications (triptans) ≤ SSS +H. perforatum ≤ increased risk of ADRs; +NSAIDs; p.o. anticoagulants ≤ risk of bleeding |
| Venlafaxine | Dryness in mouth, headache, sweating, nervousness, drowsiness, dizziness, etc. | +serotoninergic medications (triptans, SSRIs) ≤ SSS |
| Tianeptine | Tachycardia, insomnia, headache, dryness in mouth, myalgia, insomnia, etc. | +MAOinhibitors ≤ collapse, hyperthermia, convulsions |

**Notes:** Some ADRs like nausea, diarrhea, and anxiety appear only in the beginning of the therapy. A consultation with a physician is required in cases of lack of improvement. Tricyclic antidepressants (TCA) are not indicated in cases of recent myocardial infarction. Dose adjustment or switch to another medication in the case of lack of effectiveness at a minimum 6 weeks is required.

| Adverse Drug Reactions (ADRs) | Advice for Overcoming the ADRs |
|---|---|
| Dryness in mouth | Application of artificial saliva products, sugar free gum, vitamin c tablets (short-term use in order to prevent tooth erosion) |
| Antimuscarinic effects (blurred vision, sedation, confusion, etc.) caused by TCA | A strict monitoring in elderly patients as well as taking medications at bed time in order to prevent falls and fractures are recommended |
| Constipation | Advice for regular healthy eating habits: more fiber, liquids, warm water in the morning, abdominal massage, laxatives |
| Sedation | Taking the medications at bed time; otherwise – dose reduction |
| Nausea | Avoiding sweet, salty, or fatty food; taking the medicine after a meal, taking smaller portions of food during the day |
| Insomnia | Taking the medications in the morning |
| Sexual disturbances caused by SSRIs | Dose reduction or change therapy; inclusion of sildenafil at a pinch |
| Hypertension caused by venlafaxine | Blood pressure monitoring regularly; reduction of venlafaxine dosage; change the therapy |
| Tachycardia caused by TCA | Dose reduction or change the therapy |
| Weight gain | Dose reduction or change the therapy |
| Orthostatic hypotension | The patient should avoid standing up abruptly, reduce caffeine intake, drink more water, practice more physical exercise to strengthen the leg muscles |
| Headache | Dose reduction or change the therapy |
| Photosensitization caused by TCA, SSRIs, venlafaxine | Applying sun cream every 2 hours and avoiding sunbathing between 10 a.m. and 4 p.m. |

# Assuring Adherence and Assessment of Adherence Level

- Literature data shows that 56% of patients taking antidepressants do not adhere to the prescribed therapy for different reasons such as patients' beliefs, side-effects, or cost.
- The patient should be convinced that the disease is curable, the therapy is based on the severity of the disease, and only strict adherence, psychotherapy provided by a specialist, and support of family and friends may lead to improvement and full recovery.

- Assessment of the level of adherence might be made during the regular patient's visits on the basis of the number of dispensed packages and the number of executed prescriptions, after a conversation with the patient regarding his attitude toward the therapy and the therapeutic plan.
- Studies concluded that the pharmacists' role is crucial for improving the level of adherence to antidepressants. A systematic review found that pharmacist interventions could be effective in improving the adherence level to antidepressants by15–27%.

# Conclusion

- Application of pharmaceutical care services for patients with depression is effective and leads to condition improvement, reduction of the side-effects, timely identification of and the overcoming of potential or actual DRPs and improvement of patients' quality-of-life.
- Collaboration between psychiatrists, pharmacists, and the active inclusion of the affected and their relatives in the therapy could optimize and improve the complex care for patients with depression and achieving the targeted therapeutic outcomes.

Thank you