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SOAP of Clinical Cases of Selected Disease Conditions

What is a SOAP note?

The **S**ubjective, **O**bjective, **A**ssessment and Plan (SOAP) note means representing a widely used method of documentation in a structured and organized way for healthcare providers.

Why should pharmacist write a SOAP notes?

A pharmacist should write a SOAP note for documentation and communication of medications and other health related requirements between pharmacists and with other health care providers. There is a difference between SOAP note of a physician and a pharmacist.

What is the difference between SOAP note of Pharmacist and Physician?

In a physician's SOAP note the assessment will be chiefly related to diagnosis and condition of disease, while in a pharmacist's SOAP note assessment will identify a drug-related problem (DRP) and need if any (like optimal dose of drug or drug duplication, allergic condition, lack of proper indication, adverse drug reaction or unwanted drug interaction) for correction in DRP.

What do you write in a SOAP note?

SOAP notes include a statement about following details –

Subjective: Chief complaint of patient, history of present illness, current medications, allergies, etc. (relevant client behaviors or status)

Objective: Physical exam findings, laboratory data, other diagnostic data, review of documentations of other physicians (observable, quantifiable, and measurable data)

Assessment: Problem finding and diagnosis (analysis of the information given by the client)

Planning: Details of the need for additional testing/consultation (an outline of the next course of action)

During writing a SOAP

- Avoid overly wordy phrasing.
- Maintain a professional care.
- Be accurate but nonjudgemental.
- Write SOAP notes. at appropriate time
- Be specific and concise
- It should not be more than 1–2 pages long.

A SOAP note must contain

- Diagnosis and care plan
- Complications or adverse reactions.
- Results of any tests and equipment used.

- Vital signs and initial health assessment.
- Self-report of the patient.
- General description of the patient.
- Doctor's name.
- Patient's name.
- Date and time of the report.
- Communication with other providers of care, the patient and their family.

Diabetes Case

Presentation

Mr. X is a 57-year-old man with type II diabetes, first diagnosed two years ago.
Other medical problems include obesity. He has no history of alcohol abuse or smoking. He presents now for a routine follow-up and is noted to have a blood pressure of 168/100 mmHg. He is asymptomatic.

Physical examination reveals a height of 5′8″, weight of 110 kg, blood pressure of 160/100 mmHg and a regular pulse of 84 bpm. There is no retinopathy. There is no clinical evidence of congestive heart failure or peripheral vascular disease.

Laboratory evaluation reveals a LDL level of 134 mg/dL, BUN of 14 mg/dL, serum creatinine of 1.2 mg/dL, and random serum glucose of 192 mg/dL and Hb1Ac level of 9.5%.

SUBJECTIVE

Type II diabetes since two years, past medical history of obesity, high BP, no history of alcohol abuse or smoking.

OBJECTIVE FINDINGS

- Patient is asymptomatic.
- Pertinent vital signs and lab values.
  - Blood pressure 168/100 mm Hg
  - Regular pulse 84 bpm
  - Serum creatinine 1.2 mg/dL
  - BMI 36.94 kg/m^2
  - LDL 134 mg/dL
  - HbA1C 9.5

ASSESSMENT

- Related complications
  - High blood pressure
  - Dyslipidemia
- Risk factor
  - Obesity (BMI >25)
  - Hb1AC ≥5.7%
  - Blood pressure ≥140/90
- Therapeutic goals
  - Tight glycemic control: Reduce Hb1AC to less than 7% without causing hypoglycemia
  - Prevention of cardiovascular disease.

  - Goal blood pressure for patients with diabetes is <130/<80
  - Reduce CVD risks by maintaining healthy cholesterol levels, LDL goal should be <100
- No current medications were maintained. There is a need for therapy in order to lower Hb1AC and manage the patient's diabetes and related conditions.

PLAN

Further tests and work-up
- Liver function tests
- Repeat blood pressure to confirm hypertension

Treatment Recommendation

To manage his diabetes, it is recommend that the patient should be started on metformin 500 mg once daily in addition to the initiation of lifestyle modifications. In the management of diabetes for this patient, drugs that may cause the patient to gain weighted should be avoided.

The patients' blood pressures should be managed with ACE inhibitors such as lisinopril 10 mg. A beta-blocker is not recommended at this point in therapy due to the masking of hypoglycemia that may company a new diabetes regimen.

Drug therapy is also recommended for this patient to control cholesterol since the values are above 130. A reduction of LDL to 99 from 134 is 26.11% reduction. Simvastatin 20 mg daily is recommended as initial treatment for this patient.

Goals and Monitoring Parameters

- Metformin use requires routine monitoring of liver function tests and serum creatinine.
- ACE inhibitor therapy requires monitoring of electrolyte levels (potassium, in particular), blood pressure, renal function and BUN.
- Simvastatin use warrants the monitoring of LFTs.
- Weight change should be monitored to assess the need for more aggressive treatment or diet restriction.
- Monitor carbohydrate and fat intake. Total fat should be less than 7% of the total calories.
- Target levels
  - Hb1AC <7%—monitor every 2–3 months
  - Blood pressures <130/80—monitor at every routine visit
  - LDL <100—monitor yearly

Routine tests should be performed to evaluate the efficacy of therapy and to monitor the progression of diabetes to prevent further complications.
- Eye examination annually.
- Serum creatinine at least annually
- Foot examination
- Screening for neuropathies

Experiment 1

OBJECT

To submit **SOAP** report on the real/hypothetical clinical case of diabetes.

Name of patient **Age:** **Sex:**

Weight: **Address of patient:**

Date: **Height** **Time**

Doctor's Name: Registration No/ID

S: SUBJECTIVE

History of diabetes with associated effected other organs reported by patient

Diabetes type I	Yes/No
Diabetes type II	Yes/No
Obesity	Yes/No
Hypertension	Yes/No
Retinopathy	Yes/No
Neuropathy	Yes/No
Length of diabetes in years:	

O: OBJECTIVE

Present status	Set Goel
Hb1AC	<7%
Blood sugar-F	50–100 mg per dL
Blood sugar-PP	100–150 mg per dL
LDL	<100
Systolic BP	≤140 mm of Hg
Diastolic BP	70–110 mm of Hg
Pulse rate	72 beats per minute
Obesity	BMI greater than 25
Serum creatinine	0.5–1.4 mg per dL
Serum urea	25–45 mg per dL

A: ASSESSMENT

Related complications

• High blood pressure • Dyslipidemia risk factor • Obesity • Hb1AC • Blood pressure • CVD risk	Yes/No Yes/No Normal/Abnormal Normal/Abnormal Normal/Abnormal Yes/No
• **Therapeutic Goals** • Blood sugar control • Prevention of cardiovascular disease • Goal blood pressure is 140/90 • Current medications were maintained	 Yes/No Yes/No Yes/No Yes/No

P: PLAN

Daily fat content taken in gram	• ——— g
Lifestyle modifications	
• Take diet of low G-index/vegitables • Weight control • Low salt intake • Habits smoke/alcohol • Aerobic exercises (minimum 30 minutes) • Love yourself (life stress free) • Blood pressure diary maintained. • Follow-up in clinic after 1 month	• Yes/No • Yes/No • Yes/No • Yes/No • Yes/No • Yes/No • Yes/No • Yes/No

Recommended Treatment by Physician

RESULT

Blood sugar (F and PP): Maintained/Not maintained

Blood pressure: Maintained/Not maintained

Carbohydrate and fat intake: Maintained/Not maintained

Weight: Maintained/Not maintained

Signature

Name and Designation of Pharmacist

Hypertension Case

Presentation

Mrs Y is a 63-year-old woman seen today for her hypertension. She has history of heaviness in chest. There is no history of dizziness, headache or fatigue. She has no other past medical history.

Physical examination reveals a height of 5′4″, weight of 90 kg, blood pressure of 160/100 mmHg and a regular pulse of 84 bpm. There is no retinopathy. There is no clinical evidence of congestive heart failure or peripheral vascular disease.

SUBJECTIVE

Patient has history of heaviness in chest. Patient is obese. No history of dizziness, headache or fatigue. She has no other past medical history.

OBJECTIVE FINDINGS

- Pertinent vital signs and lab values.
  - Blood pressure 168/100 mm Hg
  - Regular pulse 84 bpm

ASSESSMENT

- Related complications
  - None
- Risk factor
  - Obesity (BMI >25)
  - Blood pressure ≥140/90
- Therapeutic goals
  - Prevention of cardiovascular disease.
  - Goal blood pressure is 140/90
- No current medications were maintained.

PLAN

- Start low fat diet, exercise and 45 min brisk walk as lifestyle modifications.
- Monitor BP at home and maintain a blood pressure diary.
- Follow-up in clinic after 1 month. Bring blood pressure diary to that visit.

Treatment Recommendation

- Start medication—hydrochlorothiazide 25 mg/day.
- Consider adding ACE-inhibitors, if BP is not controlled. Drug therapy is also recommended for this patient to control cholesterol since the values are above 130. A reduction of LDL to 99 from 134 is 26.11% reduction. Simvastatin 20 mg daily is recommended as initial treatment for this patient.

Goals and Monitoring Parameters

- Weight change should be monitored to assess the need for more aggressive treatment or diet restriction.
- Monitor carbohydrate and fat intake. Total fat should be less than 7% of the total calories.
- Blood pressures—less than 140/90—monitor at every routine visit

Experiment 2

OBJECT

To submit **SOAP** report on the real/hypothetical clinical case of **hypertension**.

Name of patient **Age:** **Sex:**

Weight: **Address of patient:**

Date: **Height** **Time**

Doctor's Name: Registration No/ID

S: SUBJECTIVE

History of hypertension with associated symptoms/complications reported by patient

O: OBJECTIVE

Present status	Set goel
Systolic BP	≤140 mm of Hg
Diastilic BP	70–110 mm of Hg
Pulse rate	72 beats per minute

A: ASSESSMENT

Related complications	Yes/No
If yes, mention the name of complications	
Obesity (BMI >25)	
• **Therapeutic goals** – Prevention of cardiovascular disease. – Goal blood pressure is 140/90 – Current medications were maintained	 Yes/No Yes/No Yes/No

P: PLAN

Daily fat content taken in gram	• ——— g
Lifestyle modifications	
• Take diet of low G-Index/vegitables • Weight control • Low salt intake • Habits smoke/alcohol • Aerobic exercises (minimum 30 minutes) • Love yourself (life stress free) • Blood pressure diary maintained. • Follow-up in clinic after 1 month	• Yes/No • Yes/No • Yes/No • Yes/No • Yes/No • Yes/No • Yes/No • Yes/No

Recommended Treatment by Physician

RESULT

Blood pressure: Maintained/Not maintained
Carbohydrate and fat intake: Maintained/Not maintained
Weight: Maintained/Not maintained

Signature
Name and Designation of Pharmacist

Angina Pectoris Case

Presentation

- Mr. Z is a 65 years old man with chest pain and heaviness from past few hours. He had few previous similar episodes exacerbated by stress and physical exertion.
- Other medical problems include obesity and hypertension. He has history of smoking and smokes 2–3 cigarettes per day. He is noted to have a blood pressure of 172/100mmHg.
- Physical examination reveals a height of 5′6″, weight of 115 kg, blood pressure of 160/100 mmHg and a regular pulse of 84 bpm. ECG reveals abnormality suggestive of angina. Laboratory evaluation reveals a LDL level of 134 mg/dL and BUN of 14 mg/dL.

SUBJECTIVE

Patient has chest pain and heaviness. Past medical history of obesity.

OBJECTIVE FINDINGS

- Pertinent vital signs and lab values.
  - Blood pressure 168/100 mm Hg
  - Regular pulse 84 bpm
  - Serum creatinine 1.2 mg/dL
  - BMI 36.94 kg/m^2
  - LDL 134 mg/dL
  - Abnormal ECG suggestive of angina

ASSESSMENT

- Provisional diagnosis—stable angina
- Related complications
  - High blood pressure
  - Dyslipidemia
- Risk factor
  - Obesity (BMI >25)
  - Blood pressure ≥140/90
- Therapeutic goals
  - Goal blood pressure for patients with diabetes is <130/<80
  - Reduce CVD risks by maintaining healthy cholesterol levels, LDL goal should be <100

PLAN

Further tests and Work-up

- Angiogram 1 week post-visit to rule-out coronary artery disease

Treatment Recommendation

To manage his chest pain, as recommend that the patient be started on aspirin and beta blockers once daily in addition to the initiation of lifestyle modifications.

The patients' blood pressures should be managed with ACE inhibitors such as lisinopril 10 mg.

Drug therapy is also recommended for this patient to control cholesterol since the values are above 130. A reduction of LDL to 99 from 134 is 26.11% reduction. Simvastatin 20 mg daily is recommended as initial treatment for this patient.

Experiment 3

OBJECT

To submit SOAP report on the real/hypothetical clinical case of **angina pectoris**.

Name of patient **Age:** **Sex:**

Weight: **Address of patient:**

Date: **Height** **Time**

Doctor's Name: Registration no/ID

SUBJECTIVE

History of angina with associated complications reported by patient

OBJECTIVE

Present status	Set goel
Systolic BP	≤140 mm of Hg
Diastolic BP	70–110 mm of Hg
Pulse rate	72 beats per minute
LDL	<100
Obesity	BMI >25
Serum creatinine	0.5–1.4 mg per dL
ECG suggestive of angina	Normal

ASSESSMENT

Related complications	Yes/No
If yes, mention the name of complications	
Obesity (BMI >25)	

• **Therapeutic goals**	
– Prevention of cardiovascular disease.	Yes/No
– Goal blood pressure is 140/90	Yes/No
– Dyslipidemia	Yes/No
– Cholerterol (125–200 mg/dL) and LDL (<100)	Yes/No
– Current medications were maintained	Yes/No

PLAN

Daily fat content taken in gram	• ——— g
Lifestyle modifications	
• Take diet rich in fruits/vegitables	• Yes/No
• Weight control	• Yes/No
• Low salt intake	• Yes/No
• Habits smoke/alcohol	• Yes/No
• Aerobic exercises (30 minutes)	• Yes/No
• Love yourself (life stress free)	• Yes/No
• Blood pressure diary maintained	• Yes/No
• Follow-up in clinic after 1 month or as directed by physician	• Yes/No

Recommended Treatment by Physician

RESULT

Blood pressure: Maintained/Not maintained

Anginal pain: Maintained/Not maintained

Lipid profile: Maintained/Not maintained

Weight: Maintained/Not maintained

Signature

Name and Designation of Pharmacist

Asthma Case

Presentation

- Master A is a 12-year-old boy with recurrent sneezing, cough, tightness of chest and breathlessness.
- He has no other significant past medical history.
- Physical examination reveals a height of 4′2″, weight of 26 kg, respiratory rate 21 per minute, heart rate 110 bpm. On auscultation rhonchi are heard in bilateral chest.
- Laboratory evaluation reveals normal CBC and other relevant investigations. Chest X-ray is normal.

SUBJECTIVE

Patient has recurrent respiratory symptoms. No significant past medical history.

OBJECTIVE FINDINGS

- Pertinent vital signs and lab values.
- Mild tachycardia and increased respiratory rate.
- Rhonchi

ASSESSMENT

- A provisional diagnosis of asthma is kept
- Therapeutic goals
  - To provide relief in breathlessness, cough and sneezing
  - Prevention of recurrence of symptoms
  - Prevent secondary infection

PLAN

Treatment Recommendation

- To manage his symptoms nebulization with asthalin should be done.
- Prevent exposure to aggravators like pollens and dust.

Monitoring

- Follow up after 5 days of therapy.

Experiment 4

OBJECT

To submit SOAP report on the real/hypothetical clinical case of **asthma.**

Name of patient **Age:** **Sex:**

Weight: **Address of patient:**

Date: **Height** **Time**

Doctor's Name: Registration no/ID

SUBJECTIVE

History of asthma with associated complications reported by patient

OBJECTIVE

Present status	Set Goel
• TLC (total lung capacity) • Chest X-ray • Lungs biopsy • Lung PFT(pulmonary function test)	• TLC (total lung capasity) Normal report • Chest X-ray Normal report • Lungs biopsy Normal report • Lung PFT (pulmonary function test) Normal report
• Breathing rate:	• Should be normal
• Rhonchi (airway sound):	No sound heard during both inhalation and exhalation

ASSESSMENT

Related complications	
Difficulty in breathing	Yes/No
– Cough and sneezing – Prevention of recurrence of symptoms – Prevent secondary infection	Yes/No Yes/No Yes/No
• A provisional diagnosis of asthma is done	Yes/No

PLAN

Lifestyle modifications	Yes/No
• Habits smoking • Aerobic exercises and pranayama • Love yourself (life stress free)	Yes/No Yes/No Yes/No
• Need of nebulization	Yes/No
• Follow-up in clinic after 1 month or as directed by physician	Yes/No

Recommended Treatment by Physician

RESULT

Chest X-ray: Maintained/Not maintained

PFT: Maintained/Not maintained

Breathing: Maintained/Not maintained

Signature

Name and designation of Pharmacist

Myocardial Infaction Case (Real/Hypothetical)

Presentation

- Master X is a middle-aged man with long history of diabetes mellitus and hypertension. He has been a chronic smoker. He came in hospital with condition of pain in left side of chest radiating to inner aspect of left arm and jaw.
- Physical examination reveals a height of 5′6″, weight of 86 kg, respiratory rate 21 per minute, heart rate 104 bpm. BP 118/94 mmHg.
- Laboratory evaluation reveals RBS 125 mg/dL and positive troponin l. ECG reveals ST ↑ in lateral leads, i.e. lead 1, aVL, V_5, V_6

SUBJECTIVE

Patient has symptoms of stable angina, i.e. patient use to feel breathlessness on exertion.

OBJECTIVE FINDINGS

- Pertinent vital signs and lab values.
- Mild tachycardia and tachypnea.
- Fina basal crepitations.

ASSESSMENT

- A provisional diagnosis of MI is kept as pain anywhere in upper half of body in patient with risk factor can be indicator of MI.
- Therapeutic goals
  - To provide symptomatic relief
  - Prevention of further cardiac damage.
  - To maintain ABC.
  - Prevent recurrence.

PLAN

Treatment Recommendation

- To manage pain with opoid analogus.
- Use of antithrombotic agents.
- Maintenance of circulation.
- Long-term use of aspirin and statin.
- To treat arrhythmia if present.
- Angioplasty

Monitoring

- To check pulse, BP, etc. 3–6 hourly in first 72 hours.
- Follow-up after 7 days of therapy.

Experiment 5

OBJECT

To prepare SOAP on **myocardial infaraction** case (real/hypothetical)

Date: **Time:**

Patient's name: **Registration no/ID:**

Gender: **Age:**

Allergic condition if any:

Doctor's name:

SUBJECTIVE

Temperature: **Pulse:**

Blood pressure:

Chief complaint of patient

History of present illness

Current medications

Allergies

Others

OBJECTIVE

Physical exam findings

Laboratory test reports and other diagnostic data

Review of documentations of other physicians

ASSESSMENT

Problem finding

Diagnosis

PLAN

Details of the need for additional testing/consultation/advice:
Follow-up

RESULT

Sign:
Name:
Designation of Pharmacist:

Rheumatoid Arthritis (Hypothetical)

Presentation

Miss A is 17-year-old female walked into hospital with complaints of pain and swelling of wrist joint and inter-phalangeal joints.

SUBJECTIVE

Pain and swelling hampers routine functioning of patient. While waking up in morning, stiffness is reported by patient.

OBJECTIVE FINDINGS

- Pertinent vital signs and lab values.
- Inflammation of asymmetrical small joint.

ASSESSMENT

- A diagnosis of rheumatoid arthritis is made on the basis of criteria decided by American Society of Rheumatology.

PLAN

Treatment Recommendation

- Usage of appropriate NSAIDs according to severity of symptoms.
- Usage of DMARDs.
- Maintaining general physical health by using vitamins and minerals supplements. Maintenance of circulation.
- Counseling.

Monitoring

- Follow-up after 15 days.

Experiment 6

OBJECT

To prepare SOAP on **rheumatoid arthritis** (real/hypothetical)

Date: **Time:**

Patient's name: **Registration no/ID:**

Gender: **Age:**

Allergic condition if any

Doctor's name:

SUBJECTIVE

Temperature: **Pulse:**

Blood pressure:

Chief complaint of patient

History of present illness

Current medications

Allergies

Others

OBJECTIVE

Physical exam findings

Laboratory test reports and other diagnostic data

Review of documentations of other physicians

ASSESSMENT

Problem finding

Diagnosis

PLAN

Details of the need for additional testing/consultation/advice:
Follow-up

RESULT

Sign:
Name:
Designation of Pharmacist:

Hyperlipidemia or Dyslipidaemia (Hypothetical)

Presentation

- Mr A is a 62-year-old male walked into hospital for routine yearly investigations.
- He has no significant past history.
- On examination, his height is 5′4″, weight 100kg, pulse rate 77/min and BP 124/82 mm Hg.
- Laboratory investigations revealed serum cholesterol 248 mg/dL, triglycerides 300 mg/dL, HDL 49 mg/dL, LDL 184 mg/dL.

SUBJECTIVE

Patient had no symptoms.

OBJECTIVE FINDINGS

- There were no objective findings.

ASSESSMENT

- A diagnosis of primary dyslipidemia is kept.

PLAN

Therapeutic Goals

To bring down levels of cholesterol and triglycerides into normal limits as their altered levels causes harm to blood vessels resulting in target organ damage, i.e. heart, brain, etc.

Treatment Recommendation

- Usage of appropriate statins (atorvastatin, rosuvastatin, etc.) with or without fenofibrate.

Monitoring

- Follow up after 1 month with repeat lipid profile report.

Experiment 7

OBJECT

To prepare SOAP on **hyperlipidemia or dyslipidemia** (real/hypothetical)

Date: **Time:**

Patient's name: **Registration no/ID:**

Gender: **Age:**

Allergic condition if any

Doctor's name:

SUBJECTIVE)

Temperature: **Pulse:**

Blood pressure:

Chief complaint of patient

History of present illness

Current medications

Allergies

Others

OBJECTIVE

Physical exam findings

Laboratory test reports and other diagnostic data

Review of documentations of other physicians

ASSESSMENT

Problem finding

Diagnosis

PLAN

Details of the need for additional testing/consultation/advice:
Follow-up

RESULT

Sign:
Name:
Designation of Pharmacist:

COPD (Chronic Obstructive Pulmonary Disease) Case (Hypothetical)

Presentation

- Mr A is a 65-year-old man with recurrent cough, tightness of chest and breathlessness.
- He has past medical history of similar complaint.
- Physical examination reveals a height of 5′2″, weight of 66 kg, respiratory rate 21 per minute, heart rate 110 bpm. On auscultation rhonchi are heard in bilateral chest.
- Laboratory evaluation reveals normal CBC and other relevant investigations. Chest X-ray is normal.

SUBJECTIVE

Patient has recurrent respiratory symptoms. There is a history of chronic smoking.

OBJECTIVE FINDINGS

- Pertinent vital signs and lab values.
- Mild tachycardia and increased respiratory rate.
- ronchi

ASSESSMENT

- A provisional diagnosis of COPD is kept
- Therapeutic goals
  - To provide relief in breathlessness, cough
  - Prevention of recurrence of symptoms
  - Prevent secondary infection

PLAN

Treatment Recommendation

To manage his symptoms nebulization with anticholinergic, beta-agonist and corticosteroids, antibiotics, if required should be done.

Monitoring

- Follow-up after 5 days of therapy.

Experiment 8

OBJECT

To prepare SOAP on **COPD (chronic obstructive pulmonary disease)** (hypothetical)

Date: **Time:**

Patient's name: **Registration no/ID:**

Gender: **Age:**

Allergic condition if any:

Doctor's name:

SUBJECTIVE

Temperature: **Pulse:**

Blood pressure:

Chief complaint of patient

History of present illness

Current medications

Allergies

Others

OBJECTIVE

Physical exam findings

Laboratory test reports and other diagnostic data

Review of documentations of other physicians

ASSESSMENT

Problem finding

Diagnosis

PLAN

Details of the need for additional testing/consultation/advice:
Follow-up

RESULT

Sign:
Name:
Designation of Pharmacist:

Epilepsy Case (Hypothetical)

Presentation

- Miss A is a 17-year-old female walked into hospital with complaints of sudden unconsciousness.
- On examination, her height is 5'4", weight 36 kg, pulse rate 77/min and BP 124/82 mm Hg.
- Investigations revealed abnormal spikes in EEG.

SUBJECTIVE

- While enquiring later, patient tells that before getting unconscious, she felt like she is entering into dark.
- Her attendant told that her face tilted toward one side and froth was coming out of her mouth. After waking up, patient does not recall much.

OBJECTIVE FINDINGS

- Pertinent relevant vital signs and EEG.

ASSESSMENT

- A diagnosis of epilepsy (GTCS) is kept.
- Therapeutic goals
  - Prevention of recurrence of symptoms.
  - To rule out any secondary cause of seizures.

PLAN

Treatment Recommendation

- Usage of appropriate antiepileptic drug like sodium valproate, carbamazepine, phenytoin, etc.

Monitoring

- Follow-up after 15 days with CECT head.

Experiment 9

OBJECT

To prepare SOAP on **epilepsy case** (hypothetical)

Date: **Time:**

Patient's name: **Registration no/ID:**

Gender: **Age:**

Allergic condition if any

Doctor's name:

SUBJECTIVE

Temperature: **Pulse:**

Blood pressure:

Chief complaint of patient

History of present illness

Current medications

Allergies

Others

OBJECTIVE

Physical exam findings

Laboratory test reports and other diagnostic data

Review of documentations of other physicians

ASSESSMENT

Problem finding

Diagnosis

PLAN

Details of the need for additional testing/consultation/advice:
Follow-up

RESULT

Sign:
Name:
Designation of Pharmacist:

Stroke Case (Hypothetical)

Presentation

- Mr A is a 61-year-old male brought into hospital in unconscious state.
- He has history of diabetes and hypertension.
- On examination, his height is 5′4″, weight 86 kg, pulse rate 77/min and BP 162/82 mm Hg.
- Laboratory investigations reveals normal CBC, RBS 222 mg/dL. CT head suggestive of mid line shift to right side due to cerebral edema.

SUBJECTIVE

After gaining consciousness patient was unable to lift arm and leg of left side.

OBJECTIVE FINDINGS

- Relevant vital signs and CT scan.
- Hemiplegia of contralateral side.

ASSESSMENT

- A diagnosis of cerebral stroke is kept.

Therapeutic Goals

- To help patient gaining full consciousness.
- To help patient recovering from hemiplegia.
- To prevent recurrence of condition.
- To control blood pressure and blood sugar.

PLAN

Treatment Recommendation

- Use of tissue plasminogen activator like reteplase.
- Usage of hypoglycemic agents to control blood sugar levels.
- IV corticosteroids (dexamethasone) and IV mannitol to reduce edema.
- Supportive measures like IV fluids, NG tube, indwelling catheterisation.
- Counseling.

Monitoring

- Follow up after 7 days.

Experiment 10

OBJECT

To prepare SOAP on **stroke** case (hypothetical)

Date: **Time:**

Patient's name: **Registration no/ID:**

Gender: **Age:**

Allergic condition if any

Doctor's name:

SUBJECTIVE

Temperature: **Pulse:**

Blood pressure:

Chief complaint of patient

History of present illness

Current medications

Allergies

Others

OBJECTIVE

Physical exam findings

Laboratory test reports and other diagnostic data

Review of documentations of other physicians

ASSESSMENT

Problem finding

Diagnosis

PLAN

Details of the need for additional testing/consultation/advice:
Follow-up

RESULT

Sign:
Name:

Depression Case (Hypothetical)

Presentation

- Miss A is a 17-year-old female walked into hospital with complaints of loss of desire of doing any task.
- On examination, her height is 5′4″, weight 36 kg, pulse rate 77/min and BP 124/82 mm Hg.
- Laboratory investigations reveal normal blood investigations.

SUBJECTIVE

Patient had previous history of getting failed in her examination. Now she has no interest in social things and rather like to stay alone all the time.

OBJECTIVE FINDINGS

- Relevant history and symptoms.

ASSESSMENT

- A diagnosis of depressive disorder is kept.

Therapeutic goals

- To recover patient from depression.

PLAN

Treatment Recommendation

- Counseling of patient, family members and friends.
- One drug from following:
  1: Tricyclic antidepressants like amitriptyline
  2: Serotonine secretion reuptake inhibitors like sertraline
  3: Novel mood elevators like olanzapine.

Monitoring

- Follow up after 15 days.

Experiment 11

OBJECT

To prepare SOAP on **depression** case (hypothetical)

Date: **Time:**

Patient's name: **Registration no/ID:**

Gender: **Age:**

Allergic condition if any

Doctor's name:

SUBJECTIVE

Temperature: **Pulse:**

Blood pressure:

Chief complaint of patient

History of present illness

Current medications

Allergies

Others

OBJECTIVE

Physical exam findings

Laboratory test reports and other diagnostic data

Review of documentations of other physicians

ASSESSMENT

Problem finding

Diagnosis

PLAN

Details of the need for additional testing/consultation/advice:
Follow-up

RESULT

Sign:
Name:
Designation of Pharmacist:

Tuberculosis Case (Hypothetical)

Presentation

- Miss A is a 27-year-old female walked into hospital with complaints of cough with blood-mixed expectoration, evening rise fever, loss of appetite.
- On examination, her height is 5′4″, weight 36 kg, pulse rate 77/min and BP 124/82 mm Hg. On auscultation crepitations are heard at right apex.
- Laboratory investigations reveal normal CBC and other relevant blood investigations. Chest X-ray reveals ground glass opacity in right apex.

SUBJECTIVE

Patient has chronic cough and loss of weight. Initially cough was dry which was later on accompanied with expectoration. There is no significant past medical history.

OBJECTIVE FINDINGS

- Relevant vital signs and chest X-ray.
- Crepitations.

ASSESSMENT

- A diagnosis of pulmonary tuberculosis is kept

Therapeutic goals

- To provide relief in cough and fever.
- To treat tuberculosis.

PLAN

Treatment Recommendation

- Counseling of patient, family members and friends.
- Usage of anti-tubercular drugs, i.e. isoniazid, rifampicin, pyrazinamide, ethambutol, streptomycin.
- Usage of antitussive agents.
- Use of rich nutritional diet.

Monitoring

- Follow up after 15 days.

Experiment 12

OBJECT

To prepare SOAP on **tuberculosis** case (hypothetical)

Date: **Time:**

Patient's name: **Registration no/ID:**

Gender: **Age:**

Allergic condition if any

Doctor's name:

SUBJECTIVE

Temperature: **Pulse:**

Blood pressure:

Chief complaint of patient

History of present illness

Current medications

Allergies

Others

OBJECTIVE

Physical exam findings

Laboratory Test reports and other diagnostic data

Review of documentations of other physicians

ASSESSMENT

Problem finding

Diagnosis

PLAN

Details of the need for additional testing/consultation/advice:
Follow-up

RESULT

Sign:
Name:
Designation of Pharmacist:

Iron Deficiency (Anemia) Case (Hypothetical)

Presentation

- Miss A is a 15-year-old female walked into hospital with complaints of lethargicness, body ache and palpitations.
- On examination, her height is 5′2″, weight 39 kg, pulse rate 90/min and BP 110/76 mm Hg.
- Laboratory investigations reveal normal Hb 6.5 mg/dL and decreased MCV, MCHC and ferritin. TIBC was more than upper limit.
- General blood picture was microcytic and hypochromic.

SUBJECTIVE

There is no significant past medical history.

OBJECTIVE FINDINGS

- Relevant vital signs and laboratory investigations.

ASSESSMENT

- A diagnosis of tron deficiency anemia is kept

Therapeutic goals

- To improve hemoglobin level.

PLAN

Treatment Recommendation

- Counseling of patient, family members and friends.
- Usage oral iron and folic acid tablets.
- Use of rich nutritional diet.

Monitoring

- Follow up after 15 days.

Experiment 13

OBJECT

To prepare SOAP on **iron deficiency anemia** case (hypothetical)

Date: **Time:**

Patient's name: **Registration no/ID:**

Gender: **Age:**

Allergic condition if any

Doctor's name:

SUBJECTIVE

Temperature: **Pulse:**

Blood pressure:

Chief complaint of patient

History of present illness

Current medications

Allergies

Others

OBJECTIVE

Physical exam findings

Laboratory test reports and other diagnostic data

Review of documentations of other physicians

ASSESSMENT

Problem finding

Diagnosis

PLAN

Details of the need for additional testing/consultation/advice:
Follow-up

RESULT

Sign:
Name:
Designation of Pharmacist:

SARS-CoV-2 Case (Hypothetical)

Presentation

- Miss AP is a 19-year-old female walked into hospital with complaints of cough, high grade fever, severe body aches since 5 days.
- On examination, her height is 5′5″, weight 39 kg, pulse rate 104/min and BP 102/76 mm Hg. On auscultation crepitations are heard at right apex.
- Laboratory investigations reveal normal CBC.
- Chest X-ray reveals ground bilateral glass opacity.
- HRCT chest suggestive of CO-RADS 5 for SARS-CoV-2.
- RT-PCR for SARS-Covid-19 is positive.

SUBJECTIVE

Patient has history of contact with SARS-CoV-2 positive patient.

OBJECTIVE FINDINGS

- Relevant history, vital signs, chest X-ray, CT chest and RT-PCR.
- Crepitations.

ASSESSMENT

- A diagnosis of SARS-CoV-2 is confirmed.

Therapeutic Goals

- To provide relief in cough and fever.
- To prevent spread of disease to other persons.
- To prevent cytokine storm.

PLAN

Treatment Recommendation

- Counseling of patient, family members and friends.
- Quarantine and isolation.
- Usage paracetamol and anti-tussive agents.
- Referral to tertiary care, if signs of cytokine storm are observed

Monitoring

- Follow up after 15 days.

Experiment 14

OBJECT

To prepare SOAP on **SARAS-CoV-2** Case (hypothetical)

Date: **Time:**

Patient's name: **Registration no/ID:**

Gender: **Age:**

Allergic condition if any

Doctor's name:

SUBJECTIVE

Temperature: **Pulse:**

Blood pressure:

Chief complaint of patient

History of present illness

Current medications

Allergies

Others

OBJECTIVE

Physical exam findings

Laboratory test reports and other diagnostic data

Review of documentations of other physicians

ASSESSMENT

Problem finding

Diagnosis

PLAN

Details of the need for additional testing/consultation/advice:
Follow-up

RESULT

Sign:
Name:
Designation of Pharmacist:

SCABIES Case (Hypothetical)

Presentation

- Miss BN is a 22-year-old female walked into hospital with complaints of itching and macules all over the body since 6 days.
- On examination, her height is 5′4″, weight 49 kg, pulse rate 77/min and BP 124/82 mm Hg.
- Laboratory investigations reveal normal CBC and other relevant blood investigations.

SUBJECTIVE

Initially patient had itching, later on macules started discharge. There is no itching on face. Itching increases at bedtime. There is no significant past medical history.

OBJECTIVE FINDINGS

- Relevant vital signs.

ASSESSMENT

- A diagnosis of scabies is kept.

Therapeutic Goals

- To provide relief itching.
- To treat scabies.

PLAN

Treatment Recommendation

- Usage of oral anti-scabies drug, i.e. tab ivermectol 12 mg stat.
- Usage of topical benzyl benzoate.

Monitoring

- Follow up after 02 days.

Experiment 15

OBJECT

To prepare SOAP on **scabies** case (hypothetical)

Date: **Time:**

Patient's name: **Registration no/ID:**

Gender: **Age:**

Allergic condition if any

Doctor's name:

SUBJECTIVE

Temperature: **Pulse:**

Blood pressure:

Chief complaint of patient

History of present illness

Current medications

Allergies

Others

OBJECTIVE

Physical exam findings

Laboratory test reports and other diagnostic data

Review of documentations of other physicians

ASSESSMENT

Problem finding

Diagnosis

PLAN

Details of the need for additional testing/consultation/advice:
Follow-up

RESULT

Sign:
Name:
Designation of Pharmacist:

Viva Voce/Synopsis

Q1. What is the difference between type I and type II diabetes?

Q2. Write lifestyle modifications for control of diabetes.

Q3. Write assessment for hypertension under SOAP.

Q4. Write plan to manage hypertension under SOAP.

Q5. Define angina pectoris.

Q6. Write objectives for angina under SOAP.

Q7. Define rhonchi in case of asthma patient.

Q8. How bronchodilators are useful in treatment of asthma patient?

Q9. Define MI.

Q10. Write plan to manage MI under SOAP.

Q11. Define rheumatoid arthritis.

Q12. Write plan to manage rheumatoid arthritis under SOAP.

Q13. Define hyperlipidemia.

Q14. What are lipid profiles?

Q15. What does COPD stand for?

Q16. What is the recommended treatment for COPD?

Q17. Define epilepsy.

Q18. What is grand-mal epilepsy?

Q19. Define stroke.

Q20. Write the name of therapeutic groups to manage stroke.

Q21. Define depression.

Q22. Write about plan to treat depression under SOAP

Q23. Write symptoms of TB.

Q24. Why multi-drugs therapy is given in case of tuberculosis.

Q25. Define anemia.

Q26. Write treatment recommended for anemia.

Q27. What is SARS?

Q28. Write treatment plan of SARS unser SOAP.

Q29. What is scabies?

Q30. Write treatment plan of scabies unser SOAP.

MCQs

Q1. In diabetes Hb_1AC should be _____.

(1) Less than 7% (2) =7% (3) More than 7% (4) None

Q2. LDL for diabetes patient should be _____.

(1) <100 (2) >100 (3) Both (4) None

Q3. The best control for systolic BP in case of hypertension should be _____.

(1) ≤140 mm (2) >150 (3) >100 (4) None

Q4. One should control these parameters for blood pressure.

(1) Salt (2) Weight (3) Fat intake (4) All of the above

Q5. Angina is related to pain in _____.

(1) Chest (2) Lung (3) Stomach (4) Kidney

Q6. Which analgesic is given to control angina?

(1) Paracetamol (2) Diclofenac (3) Phenylbutazone (4) Aspirin

Q7. Rhonchi is characteristic of which disease?

(1) Asthma (2) Pain (3) Hypertension (4) Headache

Q8. Bronchodialator is used in case of _____.

(1) Headache (2) Pain (3) Hypertension (4) Asthma

Q9. MI is disease of _____.

(1) Heart (2) Lung (3) Stomach (4) Kidney

Q10. Treatment recommended in MI disease is _____.

(1) Antithrombotics (2) Angioplasty (3) Opoid analgesics (4) All of the above

Q11. RH factor parameter is used for _____.

(1) Headache (2) Joint pain (3) Hypertension (4) Asthma

Q12. Objective findings for rheumatoid arthritis is _____.

(1) Inflammations in joints (2) Lab. values (3) Both (4) None

Q13. For hyperlipidemia in which parameters are important _____.

(1) HDL and LDL (2) Cholesterol (3) Triglycerides (4) All of the above

Q14. Hyperlipidemia causes damage to which organ _____.

(1) Heart (2) Brain (3) Both (4) None

Q15. Recommended treatment is given for COPD _____.

(1) Anticholinergics (2) Corticosteroids (3) Beta agonists (4) All of the above

Q16. COPD disease is related to _____.

(1) Lung (2) Stomach (3) Heart (4) Brain

Q17. EEG parameter is concerned to diagnose _____.

(1) Lung (2) Brain (3) Heart (4) Stomach

Q18. Which are the characteristics of epilepsy _____?

(1) Abnormal EEG (2) Seizures (3) Loss of consciousness (4) All of the above

Q19. Recommended treatments for epilepsy are _____.

(1) Plasmogen activator (2) Hypoglycemics (3) Corticosteroids (4) All of the above

Q20. Therapeutic goel for stroke is _____.

(1) Recover from hemiplegia (3) Conscious state

(2) Control BP (4) All of the above

Q21. Which drug belongs to tricyclic anti-depressant in treatment of depression _____?

(1) Amitriptyline (2) Sertaline (3) Olanzapine (4) All of the above

Q22. Which of the following category of drug is used in treatment of depression?

(1) Tricyclic anti-depressant (3) Mood elevators

(2) Serotonin secretion reuptake inhibitor (4) All of the above

Q23. Which of the following are the symptoms of TB?

(1) Loss of apetite (2) Weight loss (3) Evening fever (4) All of the above

Q24. Which of the following is not anti-tubercle drugs?

(1) Refampicin (2) Ethambutol (3) Isoniazide (4) Amikacin

Q25. Anemia is caused by:

(1) Lack of RBC (2) Lack of hemoglobin (3) Folic acid (4) All of the above

Q26. Which vitamin helps in formation of hemoglobin?

(1) Vitamin A (2) Vitamin D (3) Vitamin C (4) Folic acid

Q27. For SARS-

(1) RT-PCR is positive (2) RT-PCR is negative (3) Both (4) None

Q28. Treatments of SARS are:

(1) Isolation (2) Counseling (3) Paracetamol (4) All of the above

Q29. Scabies is a:

(1) Viral infection (2) Fungal infection (3) Bacterial infection (4) None

Q30. Which of the following drug does not belong to antifungal agent:

(1) Fluconazole (2) Ketoconazole (3) Metronidazole (4) Benzyl benzoate

ANS

Q1. (1)	**Q2.** (1)	**Q3.** (1)	**Q4.** (4)	**Q5.** (1)	**Q6.** (4)	**Q7.** (1)
Q8. (4)	**Q9.** (1)	**Q10.** (4)	**Q11.** (2)	**Q12.** (3)	**Q13.** (4)	**Q14.** (3)
Q15. (4)	**Q16.** (1)	**Q17.** (2)	**Q18.** (4)	**Q19.** (4)	**Q20.** (4)	**Q21.** (1)
Q22. (4)	**Q23.** (4)	**Q24.** (4)	**Q25.** (4)	**Q26.** (4)	**Q27.** (1)	**Q28.** (4)
Q29. (2)	**Q30.** (3)					