PSY.OPT12 Treating Schizophrenia: Therapies and the Interactionist Approach

Total Marks

AQA 7182 · Calculators not allowed · about 90 minutes

Name: _____ Date: ____ / ____ / _____

Answer ALL questions. Show all your working.

1 Outline how typical antipsychotic drugs, such as chlorpromazine, are thought to reduce symptoms of schizophrenia. Name the neurotransmitter system involved and the basic mechanism of action in the brain.

(Total for Question 1 is 2 marks)

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2 Describe one advantage and one disadvantage of atypical antipsychotics (for example clozapine or risperidone) compared to typical antipsychotics when treating schizophrenia.

(Total for Question 2 is 3 marks)

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3 Outline the aims of cognitive behaviour therapy for psychosis (CBTp) when used to treat a patient diagnosed with schizophrenia, and give one typical technique used in CBTp.

(Total for Question 3 is 3 marks)

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4 Outline how a token economy programme might be used to manage institutionalised or long-stay patients with schizophrenia. State one intended behavioural target and one ethical concern about token economies.

(Total for Question 4 is 4 marks)

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5 Describe one aim of family therapy for schizophrenia and one way family therapy might reduce relapse rates in patients returning home from hospital.

(Total for Question 5 is 2 marks)

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6 Outline Meehl's original diathesis-stress model for schizophrenia and identify one limitation of the original model compared with modern versions.

(Total for Question 6 is 2 marks)

7 A vignette for application: Kwame is a 24 year old recently discharged from hospital following a first psychotic episode. He continues to have occasional auditory hallucinations and has poor adherence to medication because of concern about side effects. His family are distressed and often shout at him in arguments. Using the interactionist approach, recommend a combined treatment plan for Kwame that integrates biological and psychological therapies. Explain how each element addresses aspects of the diathesis-stress model in this case.

(Total for Question 7 is 6 marks)

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8 Identify two common side effects associated with typical antipsychotics and state one monitoring or management strategy for each side effect.

(Total for Question 8 is 3 marks)

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9 Describe one piece of empirical evidence that supports the effectiveness of combining antipsychotic medication with CBT for psychosis, and briefly explain why this supports the interactionist treatment approach.

(Total for Question 9 is 3 marks)

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10 Outline one strength and one limitation of the interactionist diathesis-stress model as an explanation for schizophrenia, focusing on its implications for treatment.

(Total for Question 10 is 2 marks)

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11 Identify two ethical issues specific to using clozapine for treatment-resistant schizophrenia, and state one practical safeguard for each issue.

(Total for Question 11 is 3 marks)

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12 Describe briefly how modern diathesis-stress models of schizophrenia differ from Meehl's original model, giving one implication of this difference for psychological treatment planning.

(Total for Question 12 is 2 marks)

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13 Discuss the interactionist approach to schizophrenia, including the diathesis-stress model and implications for combined biological and psychological treatment. In your answer consider strengths and limitations, and refer to evidence where appropriate.

(Total for Question 13 is 16 marks)

Mark scheme · PSY.OPT12 Treating Schizophrenia: Therapies and the Interactionist Approach

Question 1

- **B1** identifies the dopamine system as involved, e.g. dopamine oe
- **B1** states the mechanism: dopamine antagonism at D2 receptors reduces positive symptoms oe
- **Answer: They act on the dopamine system: typical antipsychotics block D2 dopamine receptors (dopamine antagonists), reducing dopamine activity and thereby reducing positive symptoms such as hallucinations and delusions.**

Question 2

- **M1** advantage: identifies reduced risk of some extrapyramidal side effects or better effect on negative symptoms oe
- **A1** explains advantage, e.g. atypicals act on serotonin as well as dopamine which can improve negative symptoms and cause fewer motor side effects oe
- **B1** disadvantage: identifies a real drawback, e.g. risk of agranulocytosis with clozapine, metabolic syndrome or higher cost oe
- **Answer: Advantage: atypicals often affect serotonin as well as dopamine, which can improve negative symptoms and tend to cause fewer motor side effects. Disadvantage: they can carry serious risks such as agranulocytosis with clozapine or metabolic side effects, and are more expensive.**

Question 3

- **M1** states aim: reduce distress from symptoms and change unhelpful beliefs about hallucinations/delusions oe
- **B1** states aim: improve coping and functioning, not only eliminate symptoms oe
- **B1** gives a technique: e.g. cognitive restructuring, behavioural experiments, reality testing or normalisation of experiences oe
- **Answer: Aims include reducing distress caused by psychotic experiences and changing unhelpful appraisals of hallucinations and delusions, and improving coping and daily functioning. A typical technique is cognitive restructuring or behavioural experiments to test unusual beliefs.**

Question 4

- **M1** describes core feature: tokens are given for desirable behaviours which can be exchanged for rewards oe
- **A1** gives an intended target behaviour, e.g. self-care, attendance at therapy, punctuality, or social interaction oe
- **M1** describes reinforcement schedule or token exchange for privileges, showing how behaviour is encouraged oe
- **A1** identifies an ethical concern, e.g. controlling patient behaviour, fairness, or whether rewards are withholding basic rights, and explains why this matters oe
- **Answer: A token economy awards tokens when patients show targeted behaviours, such as grooming, social interaction or attending activities; tokens are later exchanged for privileges or items. An ethical concern is that it can be controlling or coercive, potentially restricting patients' autonomy if basic needs are withheld as rewards.**

Question 5

- **B1** identifies an aim: reduce family stress, improve communication and reduce expressed emotion oe
- **B1** describes mechanism: improving communication and psychoeducation reduces stress on the patient and lowers relapse risk oe
- **Answer: An aim is to reduce family stress and expressed emotion by improving communication and providing psychoeducation. This can lower relapse risk by reducing household stress that might trigger symptoms.**

Question 6

- **B1** outlines Meehl: a single schizogene confers vulnerability which interacts with chronic stress, especially from upbringing, leading to schizophrenia in susceptible people oe
- **B1** identifies limitation: overly genetic/deterministic, ignores multiple genes and biological or environmental complexity, modern models include multiple diatheses and gene-environment interactions oe
- **Answer: Meehl proposed a single schizogene created vulnerability which, combined with chronic stress from family environment, produced schizophrenia. A limitation is its genetic determinism and simplicity: modern models treat diathesis as multiple biological and psychological vulnerabilities interacting with various stresses.**

Question 7

- **M1** recommends a biological treatment, e.g. prescribing an atypical antipsychotic like risperidone or switching to clozapine if treatment resistant, and/or adjusting dose to reduce side effects oe
- **A1** explains how this addresses diathesis: reduces neurochemical activity causing positive symptoms, lowering biological vulnerability's expression oe
- **M1** recommends a psychological intervention, e.g. CBTp to help Kwame cope with hallucinations and challenge beliefs about voices, or family therapy to reduce expressed emotion and improve communication oe
- **A1** explains how CBTp and family therapy address stress: CBTp improves coping and reduces distress from symptoms, family therapy reduces social stress from high expressed emotion, lowering relapse triggers oe
- **M1** mentions adherence strategy or combined care, e.g. psychoeducation about side effects, monitoring, shared decision making, or use of depot injections if appropriate oe
- **A1** explains how adherence strategies reduce stress and ensure biological treatment works, showing interactionist rationale for combined treatment oe
- **Answer: Suggest switching or starting an atypical antipsychotic and adjusting medication to reduce side effects, combined with CBTp to help Kwame reappraise and cope with auditory hallucinations, and family therapy to reduce expressed emotion at home. Add psychoeducation about side effects, shared decision making or depot medication if adherence remains poor. The meds reduce biological expression of psychosis, CBTp reduces symptom distress and maladaptive appraisals, and family therapy lowers social stressors that can trigger relapse, exemplifying the diathesis-stress approach.**

Question 8

- **B1** identifies one side effect, e.g. extrapyramidal symptoms or parkinsonism oe
- **B1** gives management: e.g. prescribe anticholinergic medication, reduce dose, or switch to atypical antipsychotic oe
- **B1** identifies second side effect or long term effect, e.g. tardive dyskinesia or sedation/weight gain, and gives a relevant monitoring/management strategy oe
- **Answer: Examples: extrapyramidal symptoms such as parkinsonism can be managed by reducing dose, switching to an atypical antipsychotic or giving anticholinergic medication; tardive dyskinesia can be monitored with regular clinical checks and, if present, treated by switching drugs or stopping the offending medication.**

Question 9

- **M1** describes a plausible empirical finding: combined medication plus CBT reduces relapse rates or improves symptoms/functioning more than medication alone, referencing trial evidence generically if not a specific study oe
- **A1** explains why this supports interactionist approach: shows addressing both biological and psychological factors gives better outcomes than treating only the biological vulnerability oe
- **A1** may mention improved coping, reduced distress or lower relapse as mechanism oe
- **Answer: Randomised trials have shown that combining antipsychotic medication with CBT leads to better symptom reduction and lower relapse than medication alone. This supports the interactionist approach because it shows that treating both biological vulnerability with drugs and psychological processes with CBT yields superior outcomes compared with addressing only one domain.**

Question 10

- **B1** strength: identifies a benefit, e.g. explains complexity of causes and supports combined treatment approaches oe
- **B1** limitation: identifies a drawback, e.g. can be vague about specifying which diatheses or stresses matter, complicating targeted interventions oe
- **Answer: Strength: it recognises multiple interacting causes and thereby supports combined biological and psychological treatments tailored to the patient. Limitation: it can be vague about specific vulnerabilities and stresses for an individual, which makes it hard to design precisely targeted prevention or intervention strategies.**

Question 11

- **B1** identifies ethical issue one: risk of agranulocytosis or severe blood disorder oe
- **B1** states safeguard: regular blood monitoring (weekly then monthly) and stopping drug if blood counts fall oe
- **B1** identifies ethical issue two: informed consent and weighing serious risks against benefits for treatment-resistant patients oe
- **Answer: Issue 1: clozapine carries a risk of agranulocytosis; safeguard: mandatory regular blood monitoring and stopping the drug if counts fall. Issue 2: there is an ethical need for fully informed consent because of serious risks; safeguard: thorough discussion of risks and benefits and ongoing review of consent.**

Question 12

- **B1** describes difference: modern models view diathesis as multiple genetic and neurodevelopmental and psychological vulnerabilities rather than a single schizogene oe
- **B1** gives implication: allows personalised psychological interventions targeting specific vulnerabilities or stressors, e.g. trauma-focused work or stress-management oe
- **Answer: Modern models see diathesis as many possible genetic, neurodevelopmental and psychological vulnerabilities rather than one schizogene. This implies treatment can be personalised, for example combining CBTp with trauma-focused therapy or stress management depending on the individual's vulnerabilities.**

Question 13

- **Level 4** (13-16): Knowledge of the interactionist approach and diathesis-stress model is detailed and accurate. Discussion is thorough and evaluates strengths and limitations with good use of evidence and clear implications for treatment. There is effective synthesis of biological, psychological and social factors and a clear, coherent argument throughout, with appropriate use of specialist terms.
- **Level 3** (9-12): Knowledge is generally accurate with some development. Discussion evaluates strengths and limitations and refers to evidence or treatment implications, but may lack depth or full integration of perspectives. Answer is mostly clear and uses relevant terminology.
- **Level 2** (5-8): Knowledge is present but limited or partially inaccurate. Discussion is superficial and may list strengths and limitations without detailed development or evidence. Links to treatment are limited or only briefly stated.
- **Level 1** (1-4): Very limited knowledge with little or no discussion. Answers may be simplistic, fragmented, or only list a few points without development. Specialist terms are largely absent.
- **Level 0** (0): No creditable content.
- **Indicative content:**
  - AO1: The interactionist approach combines biological, psychological and social explanations, arguing schizophrenia arises from a vulnerability (diathesis) interacting with life stress.
  - AO1: Meehl's original model proposed a single schizogene producing a biologically vulnerable schizotypic personality, with social stress, especially from family, triggering schizophrenia. Modern models view diathesis as multiple genetic, neurodevelopmental and psychological factors, and stress as wider, including urbanicity, drug use and trauma.
  - AO1: Biological treatments such as antipsychotic medication reduce neurochemical contributors to symptoms, while psychological therapies such as CBTp and family therapy address cognitive appraisals and social stressors; token economies manage behaviour in institutional settings.
  - AO3: Strengths include greater explanatory power than single-factor models, clinical utility in supporting combined treatment plans, and empirical support from trials showing medication plus CBT can be more effective than medication alone.
  - AO3: Limitations include risk of vagueness about specific diatheses and stresses for individuals, potential for blaming social factors if misinterpreted, and practical issues of integrating services across psychiatry and psychotherapy. There are also challenges in identifying causal pathways in complex interactions.
  - AO3: Evidence considerations: cite generic trial findings that combined treatment can reduce relapse and improve functioning; note genetic and neurodevelopmental evidence for biological vulnerability and epidemiological evidence for social risk factors such as urban living, migration and cannabis use as stressors.
  - AO2: Implications for treatment include the rationale for integrated care teams, personalised treatment planning, psychoeducation for families, and the use of CBTp alongside medication to improve adherence and coping.
  - AO3: Evaluate balance of support: while combined treatment often yields better outcomes, effect sizes vary and access to CBTp or family therapy may be limited. Also consider ethical and practical issues in prescribing, monitoring side effects and obtaining informed consent.
  - AO3: Conclude with reasoned judgement: the interactionist approach is pragmatic and clinically useful, offering a more complete account and better treatment guidance than single-factor models, but its vagueness and implementation challenges should be acknowledged.