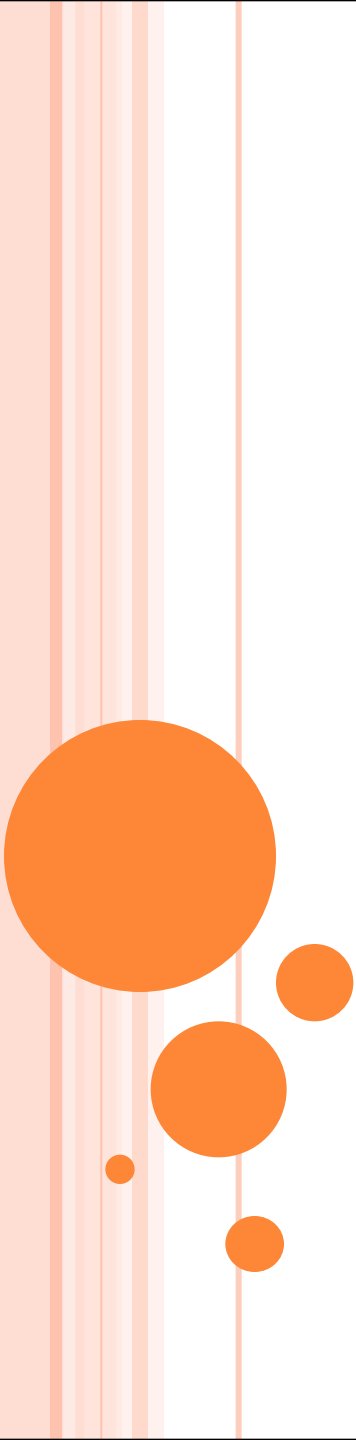




PHARMACOLOGIC TREATMENT OF SCHIZOPHRENIA

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Course Code and Name

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PRIMARY QUESTION

Objective:

- ✓ Highlight recent developments & current controversies
- ✓ Gaps in the knowledge
- ✓ Suggest research

Primary Question:

- Recent developments
- Current controversies



INNOVATION OF RESEARCH QUESTION

Based on:

- ✓ Researcher's interest and approach
- ✓ Need to identify information gaps
- ✓ Desired outcome

Application:

Helps in:

1. Information gaps
2. Directionality of future research

Relevance:

1. Comprehensive Knowledge significantly improves the pharmacologic management of the disease



SIGNIFICANCE OF PRIMARY QUESTION HELPED

- Areas that need improvement where treatment of disease is concerned
- Recent development in the pharmacologic management of the disease
- Current controversies associated with this type of treatment
- New areas that would require further research
- Bring all information on pharmacologic treatment of schizophrenia in one place



SOCIETAL IMPACT OF PRIMARY QUESTION

- Appreciate works
- Highlight the important position
- Providing more insight
- Provided guiding principles



PROCEDURE: METHODOLOGY

- Descriptive
- Systematic Meta-analysis
- Guiding hypothesis:

By way of identifying the information gaps within the existent body of knowledge through systematic and comprehensive review, the type of research ideally suited to fill these gaps can be identified and discussed

- Review of **ALL** available information on the topic



SUSTAINABILITY AND LIMITATIONS OF THE METHODS

Sustainability:

- Provided bulk information in answering major research questions

Limitations:

Failed to provide:

- ✓ Inclusion criteria
- ✓ Scheme that they applied in their review
- ✓ Research recommendation of some of the research topics



HYPOTHESIS EXPLANATION

Hypothesis:

- By way of identifying the information gaps within the existent body of knowledge through systematic and comprehensive review of available literature, the type of research ideally suited to fill these gaps can be identified and discussed.

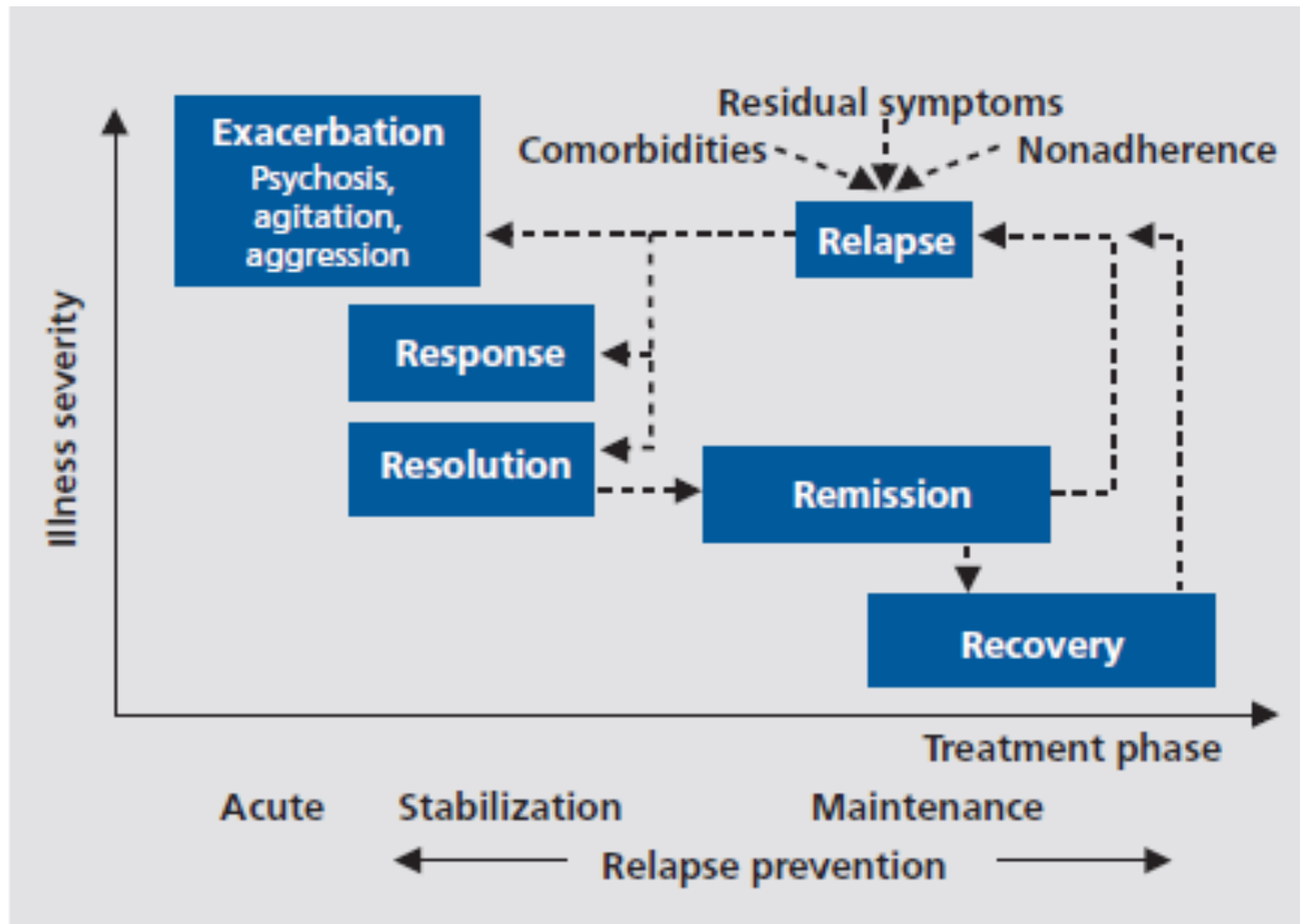
Explanation:

- Need to identify gaps in the knowledge that is rooted in the topic
- By identifying gaps & controversies, they could identify potent research question
- From research question identified, they can deduce viable research suited to address each topic and hence fill these gaps



RESULTS: RECENT DEVELOPMENTS

- Summary of **treatment stages in** pharmacologic treatment of the disease



RESULTS: RECENT DEVELOPMENTS

First vs. Second-generation:

- Focus of efficacy research- **relative metrics**
- **Prescribing practices & cost- effectiveness** of therapy
- Indications, benefits, & risks of **long-term** pharmacotherapy in schizophrenia
- **Relapse-prevention studies – reduce risk of psychotic relapse and re-hospitalization**



RESULTS: RECENT DEVELOPMENT

Considerations in Choosing Antipsychotic regimens:

Illness profile	Patient profile	Medication profile
History of illness onset and course	Vulnerability to adverse effects	Efficacy
	Tolerance of adverse effects	Tolerability (short and long-term)
	Insight and attitude toward illness	Delivery methods/formulations available
Presenting signs and symptoms		Need for monitoring
	Preference for treatment approaches	Availability/cost
		Pharmacokinetics
Past treatment response	Comorbid medical conditions	
	Comorbid psychiatric conditions	
	Comorbid substance abuse	
	Social support network	



RESULTS: RECENT DEVELOPMENTS

Relative Efficacy:

- Response rates to treatment quite high among people with the first-episode or those with rapid –onset illness
- Subsequent management of disease tends to favor second-generation drugs e.g. Olanzapine; Risperidone

Treatment Outcome:

- Quantitative assessment instruments
- Propensity to achieve remission in some patients within 4 to 6 weeks
- Increased acceptance of the concept of **RECOVERY**



RESULTS: CURRENT CONTROVERSIES

- Efficacy of **Clozapine** in managing negative symptoms of schizophrenia
- **Neurological Adverse Effects** – extrapyramidal effects: **acute dystonia reaction, akathisia, parkinsonism, tardive dyskinesia**
- Second-generation drugs – increased propensity for **metabolic adverse effects** e.g. insulin resistance and dyslipidemia
- There is need to conduct research that would provide an **appropriate validated dose equivalences**



INTERPRETATION

- Most antipsychotic drugs have been compared to the novel **Haloperidol** – the marketed leader at the point
- This comparison raised logical concern that?
“the choice of that medication, and its utilization in potentially higher than necessary doses, might have served to accentuate differences in the risk for neurologic adverse effects” (Kane & Correll, 2010)

Implication:

- **Significant overdoses** with resultant increased occurrence of drug adverse effects



ETHICAL QUESTIONS

Regarding the literature they chose to review:

1. Did they follow all ethical consideration of research using human subjects?
2. Were any subjects harmed during the research?
3. Did they seek approval from the relevant ethical committees and boards to conduct the research?
4. Was their research conducted with strict adherence to all the ethical principles of research?



FUTURE IMPACT

- Things to put into consideration by future researchers looking to replicate the research
- Provide guidelines on how future researchers should conduct themselves in their research
- Emphasizes need to protect subjects from all harmful scenarios that could occur within research settings
- Continually prompts the future generation to conduct research studies in ethical manner



RELEVANCE AND ALTERNATIVE VIEWS

Relevance:

- If science considers ethical values, then the lives of humans & other creatures are not endangered by destructive agents like atomic bombs and chemical weapons.
- Measures should be taken to avoid using science against humans. This can be achieved by promotion of **scientists' moral values**.

Alternative Views:

- Research ethics **significantly limits the progression of research & development of the knowledge on human subjects**



CONCLUSION

- **Hypothesis** – Identifying knowledge gaps through comprehensive review of the available literature to help guide directionality of future research
- **Primary question** – recent developments and current controversies in the topic
- **Research** – descriptive study
- **Method** – Systematic meta-analysis of available literature
- **Key finding** – need for provision of validated dose equivalences
- **Limitation** – failed to identify their inclusion criteria which questions the validity of the literature use in the context of this research



REFERENCES

- Kane, M. J. & Correll, U. C. (2010). Pharmacologic Treatment of Schizophrenia. *Pharmacological Aspects*, 12(3): 345-357

