BEYOND THE EARLY PSYCHOSIS GUIDELINES: Working with Patient and Optimizing Treatment

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OBJECTIVES

- By the end of the presentation the participants will be able to:
- Describe general dosing strategies for antipsychotics in patients with psychosis
- Identify and monitor side effects in individuals with early psychosis on antipsychotics
- Describe how side effects can impact medication adherence
- Identify signs that a patient may be non-adherent to their antipsychotic medication
- Utilize the CSC team members to develop a personalized plan on adherence to medication to meet a patient's goals

OVERVIEW OF GUIDELINES

WHAT DO THEY SAY?

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EARLY PSYCHOSIS GUIDELINES

- Various guidelines exist for Early Psychosis.
- Breakdown by different sections of recommendations
  - Antipsychotics
  - Managing Side Effects
  - Limiting certain medications

NAVIGATE PRESCRIBER MEDICATIONS

- First Line
  - Aripiprazole, quetiapine, risperidone/paliperidone, ziprasidone
- Second Line
  - Olanzapine
  - First Generations: chlorpromazine and haloperidol
- Clozapine
- Long-Acting Formulations

Robinson, D. Quick Guide to NAVIGATE Psychopharmacological Treatment. April 2022. Navigate Consultants. http://navigateconsultants.org/2020manuals/director_2020.pdf

NAVIGATE DOSING AND STRATEGIES

- Staging:
  - Stage 1: First line →
  - First line or Second Line →
  - Stage 3: Second Line or Clozapine
- Dosing:
  - Lower dosing required for first episode of schizophrenia
  - Often responsive to single second-generation antipsychotic
  - Balance of response and minimizing side effect including dose reduction as 1st option

Robinson, D. Quick Guide to NAVIGATE Psychopharmacological Treatment. April 2022. Navigate Consultants. http://navigateconsultants.org/2020manuals/director_2020.pdf

APA GUIDELINES

- The American Psychiatric Association Practice Guideline for the Treatment of Patients With Schizophrenia
  - Initiate treatment with an antipsychotic medication
  - Lower medication doses may be required compared to multi-episode schizophrenia and therefore appropriate
  - Younger individuals with FEP may be more likely to gain weight on antipsychotics and this should be taken into consideration
  - No difference in response or remission on olanzapine, quetiapine, ziprasidone, aripiprazole, or paliperidone in studies.

Keepers GA, Fochtmann LJ, Anzia JM, Benjamin S, Lyness JM, Mojtabai R, Servis M, Walaszek A, Buckley P, Lenzenweger MF, Young AS, Degenhardt A, Hong SH; (Systematic Review). The American Psychiatric Association Practice Guideline for the Treatment of Patients With Schizophrenia. Am J Psychiatry. 2020 Sep 1;177(9):868-872. doi: 10.1176/appi.ajp.2020.177901. PMID: 32867516.

OTHER GUIDELINES

- Do not specify specific medications but rather
- First line – second generation antipsychotics
- Second Line – first generation antipsychotics
- Third Line – Clozapine – Treatment resistance or persistent suicidal ideation
- Most guidelines place **olanzapine** in the second line group due to weight gain and metabolic side effects.
- New Metformin Guidelines!!! (later in the presentation)

MOVING TOWARD PERSONALIZED MEDICATION OPTIONS

STRATEGIES, AND OPTIMIZATION

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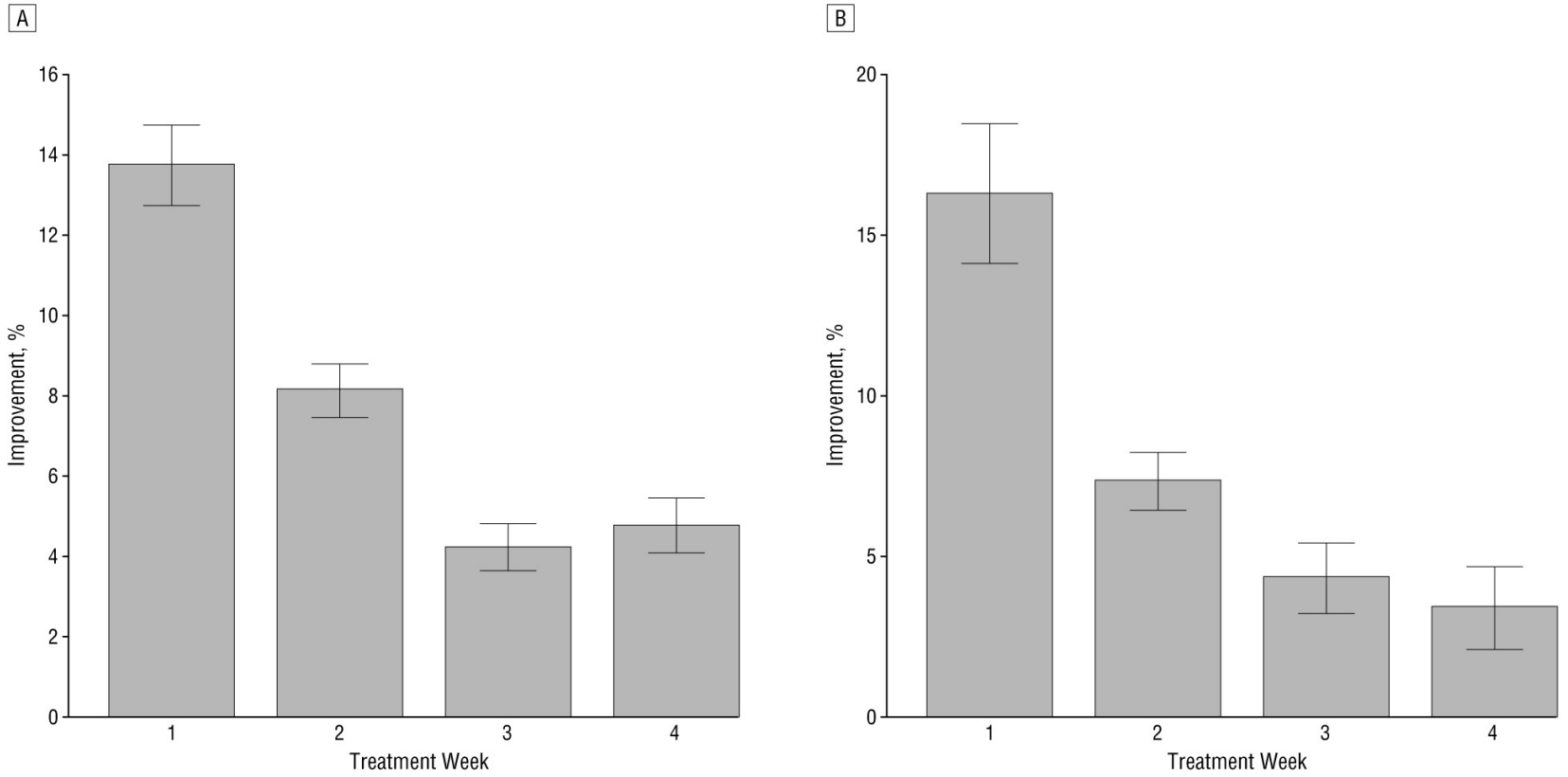
DOSING STRATEGIES AND OPTIMIZING ANTIPSYCHOTICS

- Research demonstrates individuals with early psychosis typically respond on average to lower doses of antipsychotics
- So how do we approach dosing to optimize response?
- How quickly do we move to titrate dosing keeping side effect risk in mind?
- How do we know when to switch medications?
- What are the individual's goals surrounding their medication?

DELAYED-ONSET HYPOTHESIS OF ANTIPSYCHOTIC ACTION
A HYPOTHESIS TESTED AND REJECTED (AGID ET AL., 2003)



Response to antipsychotic treatment over time.
A, Mean overall clinical improvement (total score) (P<.001).
B, Mean change in core psychotic symptoms (P<.01). P values represent the main effect of time.

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EARLY IMPROVEMENT AND RESPONSE

- Response to antipsychotics is typically considered a reduction of 50% of symptoms with an adequate trial of therapeutic dose
- Early prediction value defined as ≥ 20% response at 2 weeks
- <20% response at 2 weeks predicted non-response to antipsychotics

Samara MT, Leucht C, Leeflang MM, Anghelescu IG, Chung YC, Crespo-Facorro B, Elkis H, Hatta K, Giegling I, Kane JM, Kayo M, Lambert M, Lin CH, Möller HJ, Pelayo-Terán JM, Riedel M, Rujescu D, Schimmelmann BG, Serretti A, Correll CU, Leucht S. Early Improvement As a Predictor of Later Response to Antipsychotics in Schizophrenia: A Diagnostic Test Review. Am J Psychiatry. 2015 Jul;172(7):617-29. doi: 10.1176/appi.ajp.2015.14101329. Epub 2015 Jun 5. PMID: 26046338.

OVERARCHING PHARMACOLOGY GOALS

- The goal of antipsychotic treatment in first episode of psychosis:
- Improve symptoms and increase functionality with goal of remission
  - Remission of symptoms is not always possible.
  - Improving functionality is possible.
- Minimizing side effects one of the keys to long term adherence and engagement
  - Zero side effects is not always possible
- Early response and remission predicts better outcomes
  - The longer people have active positive symptoms of psychosis the worse the outcomes
  - Schizophrenia (Psychosis) is both neurodevelopmental with symptom onset long before first episode and neurodegenerative with long term decline in functioning, cognition, and response to treatment.

- START LOW AND GO SLOW!!!

- OR MAYBE…

DOSING STRATEGIES

- Go at an **appropriate pace**.

- This will be determined by tolerability and side effects (**individualization**)
  - Not every person can increase at the same pace.

MORE VISITS WHEN TITRATING

- Individual tolerance to titration and response requires you to see participants more often
  - **Lucky us!** Many early psychosis program protocols recommend twice monthly appointments with the psychiatric clinician.
  - May need to see weekly for optimal benefit.
- Remember average doses for FEP patients in studies: on next slide
  - Monitor for early response and lay a good foundation for shared decision making
  - Don’t wait to discuss target doses, Long Acting Injectables, or metformin

AVERAGE DOSE IN RAISE-ETP STUDY

Medication in oral formulation	Mean Modal Dose in total mgs per day	Standard Error
Aripiprazole	11.7947	1.0650
Paliperidone	6.1699	0.4912
Quetiapine	302.35	31.4412
Risperidone	2.8795	0.2233
Ziprasidone	114.65	11.5487
Haloperidol	7.4112	1.4649
Olanzapine	16.0956	1.8331
Clozapine	330.05	51.1483

Robinson DG, Schooler NR, Correll CU, John M, Kurian BT, Marcy P, Miller AL, Pipes R, Trivedi MH, Kane JM. Psychopharmacological Treatment in the RAISE-ETP Study: Outcomes of a Manual and Computer Decision Support System Based Intervention. Am J Psychiatry 2018 Feb 1;175(2):169-179. doi: 10.1176/appi.ajp.2017.16080919. Epub 2017 Sep 15. PMID: 28945118; PMCID: PMC5794655.

KNOWING YOUR MEDS

- Positive symptoms of psychosis are still primarily treated through dopamine blockade at post-synaptic D2 receptors.
- Partial Agonists (inherent D2 activity) vs. Full D2 Antagonists (theoretically get to zero D2 activity in post-synaptic neuron)
- Partial – aripiprazole, brexpiprazole, cariprazine
- Full D2 Antagonists – Rest of the antipsychotics… (well mostly)
- Clozapine – very limited D2 affinity (treatment resistant magic) – almost no activity; quetiapine very little D2 affinity (better for mood)
- Xanomeline-Trospium chloride (Cobenfy) – Muscarinic Agonist (M1/M4)
  - Not yet well studied in FEP

NOT AN ALGORITHM BUT AN ART

- Considerations
- Choose medications that have long acting-injectable (LAI) options
- Consider starting a partial agonist first
  - Response = less long term D2 blockade
  - Aripiprazole – 10mg close to target average should see some response at 2 weeks
  - Non-response should be seen by 2 weeks at therapeutic dose
- Move to a full D2 antagonist with consideration of side effect profile
  - Risperidone, paliperidone both have LAI formulations
  - Can choose other medications, but limited to oral without LAI

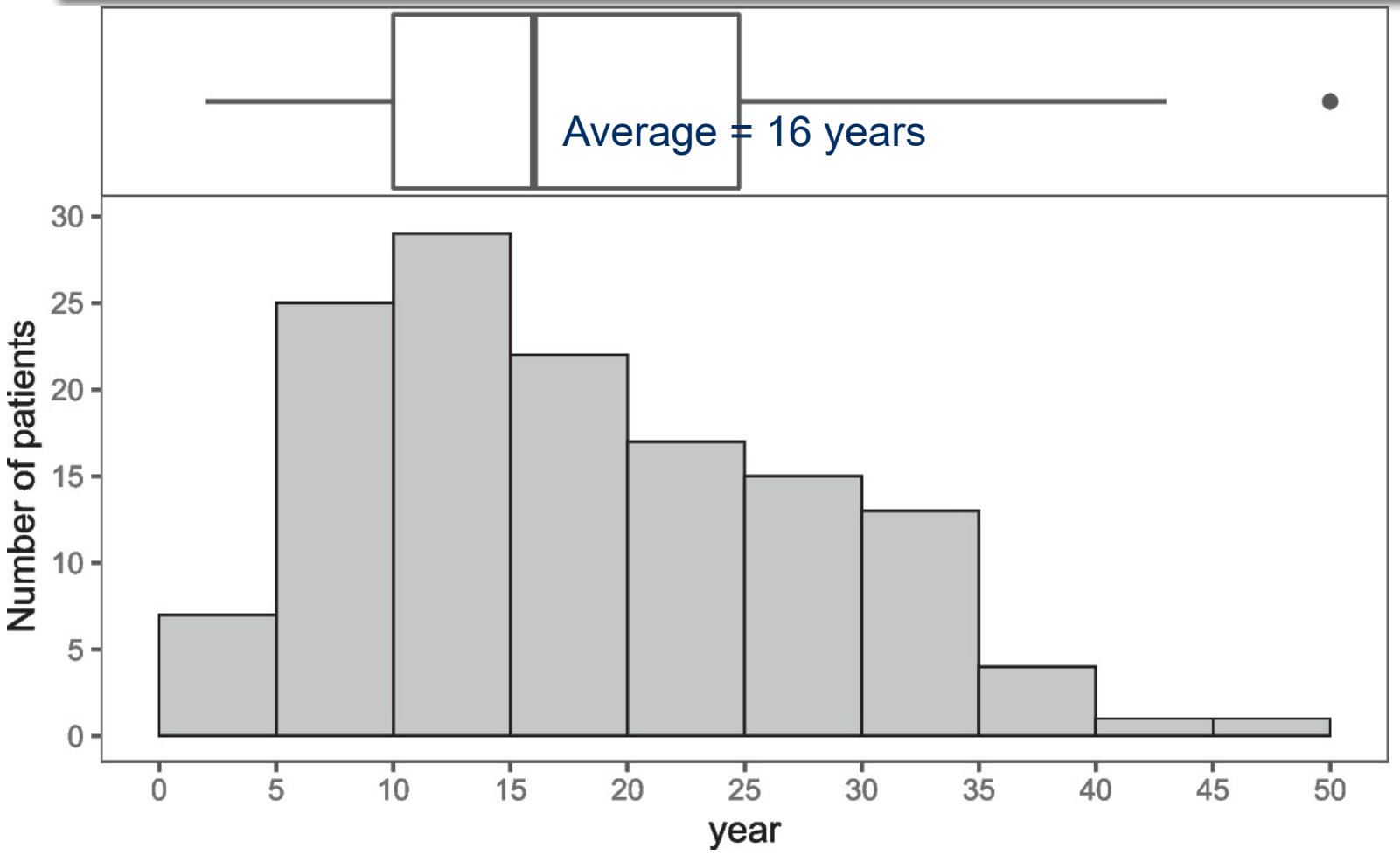
DON'T FORGET ABOUT US

- First generation antipsychotics are often underused
- Consider in patients with positive response to full D2 blockade SGAs but having residual symptoms.
  - Risperidone 6mg is pharmacologically similar to FGAs regarding side effect risk.
  - I.e. if patient responds well but not a full response at 6mg consider haloperidol
  - Limited benefit to cycling through more SGAs.
  - Move to clozapine early in treatment

TREATMENT RESISTANT SCHIZOPHRENIA

- Treatment Resistant Schizophrenia (TRS)
  - Does occur in CSC Early Psychosis Programs.
  - Do not wait to start Clozapine.

CLOZAPINE INITIATION IN SCHIZOPHRENIA



Time since diagnosis of schizophrenia

Hatano M, Kamei H, Takeuchi I, Gomi K, Sakakibara T, Hotta S, Esumi S, Tsubouchi K, Shimizu Y, Yamada S. Long-term outcomes of delayed clozapine initiation in treatment-resistant schizophrenia: a multicenter retrospective cohort study. BMC Psychiatry. 2023 Sep 15;23(1):673. doi: 10.1186/s12888-023-05176-y. PMID: 37715155; PMCID: PMC10504791.

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EARLY IS BETTER FOR CLOZAPINE

- If initiated in the first 3 years of TRS leads to:
  - Decreased Negative symptoms
  - Improved functioning
    - Munoz-Manchado et al. 2024
- Early Vs Delayed Initiation from TRS (2 failed meds)
  - Delay >2.8 years = 30.8% response rate
  - Start < 2.8 years = 81.6% response rate
    - Yoshimura et al, 2017
- Note on Clozapine REMS

YOUR MEDS ARE HELPING, RIGHT?

THE IMPORTANCE OF MONITORING SIDE EFFECTS AND THE IMPACT ON ADHERENCE

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WHERE DO WE START?

What is the goal?

Get the person and family back for another visit!

WHAT ARE THE GOALS:
ANTIPSYCHOTICS - BENEFITS VS RISK

- Goal #1 – Treat symptoms to achieve remission: includes positive, negative, and cognitive symptoms
- Goal #2 – if cannot achieve remission then reduction of symptoms to improve functionality, cope with symptoms, and live a valuable or meaningful life
- Goal #3 – improve health outcomes overall
  - We should our best to not worsen things. Patients should feel good and be as healthy as they can be which includes both mental and physical health.

BEYOND PSYCHOSIS– DON'T FORGET ABOUT…

- Illnesses in the patients we work with expand beyond what is often discussed
- Schizophrenia/disorders of psychosis are systemic illnesses (not cause by antipsychotics)
- Current understanding includes that of:
  - Pro-inflammatory state and chronic inflammation
  - Metabolic dysfunction - Diabetes risk and rates independent of antipsychotics (Kirkpatrick)
    - Abnormal glucose and energy metabolism (peripheral and brain) (Sarnyai)
  - Cardiac illness – hypertension related to cognitive impairment; increased cardiovascular risk (Kirkpatrick)
  - Immunological abnormalities - Autoantibody increases, antibodies to intestinal antigens.(Kirkpatrick)
  - Subtle endocrine abnormalities (Kirkpatrick)

THE IMPACT OF ILLNESS NOT THE IMPACT OF MEDICATIONS

- Lifespan shortened by ~25 years – excess heart disease and cardiac mortality (Kilbourne)
- All cause mortality risk factors (Beary)
  - Hypertension, smoking, Diabetes Mellitus, dyslipidemia, obesity, physical activity (sedentary patients), antipsychotics, alcohol use and illicit substances

AT THE TIME THE FEP DOOR OPENS

Raise-ETP Study Pre-treatment patient factors:

- Obese or Overweight 48.3%
- Smoking Tobacco 50.8%
- Dyslipidemia 56.5%
- Prehypertension 39.9%
- Hypertension 10.0%
- Metabolic Syndrome 13.2%
- Prediabetes:
  - glucose-based definition 4.0%
  - hemoglobin A1c 15.4%
- Diabetes:
  - glucose-based definition 3.0%
  - hemoglobin A1c 2.9%

Robinson DG, Schooler NR, Correll CU, John M, Kurian BT, Marcy P, Miller AL, Pipes R, Trivedi MH, Kane JM. Psychopharmacological Treatment in the RAISE-ETP Study: Outcomes of a Manual and Computer Decision Support System Based Intervention. Am J Psychiatry. 2018 Feb 1;175(2):169-179. doi: 10.1176/appi.ajp.2017.16080919. Epub 2017 Sep 15. PMID: 28945118; PMCID: PMC5794655

SIDE EFFECT MONITORING – ITS IMPORTANT!

- PAFIP 3-Year Follow-up of RCTs (FEP): ()
- Treatment discontinuation due to side effects:
  - Aripiprazole 12.83%; quetiapine = 12.9%; olanzapine = 14.55%
  - **risperidone = 31.75%; ziprasidone =37.1%, haloperidol = 32.14%**
- Most problematic side effects reported that led to discontinuation –
  - somnolence, extra-pyramidal symptoms, and adverse sexual side effects

Gómez-Revuelta M, Pelayo-Terán JM, Juncal-Ruiz M, Vázquez-Bourgon J, Suárez-Pinilla P, Romero-Jiménez R, Setién Suero E, Ayesa-Arriola R, Crespo-Facorro B. Antipsychotic Treatment Effectiveness in First Episode of Psychosis: PAFIP 3-Year Follow-Up Randomized Clinical Trials Comparing Haloperidol, Olanzapine, Risperidone, Aripiprazole, Quetiapine, and Ziprasidone. Int J Neuropsychopharmacol. 2020 Apr 23;23(4):217-229. doi: 10.1093/ijnp/pyaa004. PMID: 31974576; PMCID: PMC7177160. https://academic.oup.com/ijnp/article/23/4/217/5715030

METABOLIC SIDE EFFECTS

- Side Effect discontinuation that occurred during titration and in 1st year with risperidone, ziprasidone, and haloperidol
- Metabolic effects were well tolerated and did not lead to Discontinuation
- Quetiapine was discontinued early (60 days) due to lack of effectiveness

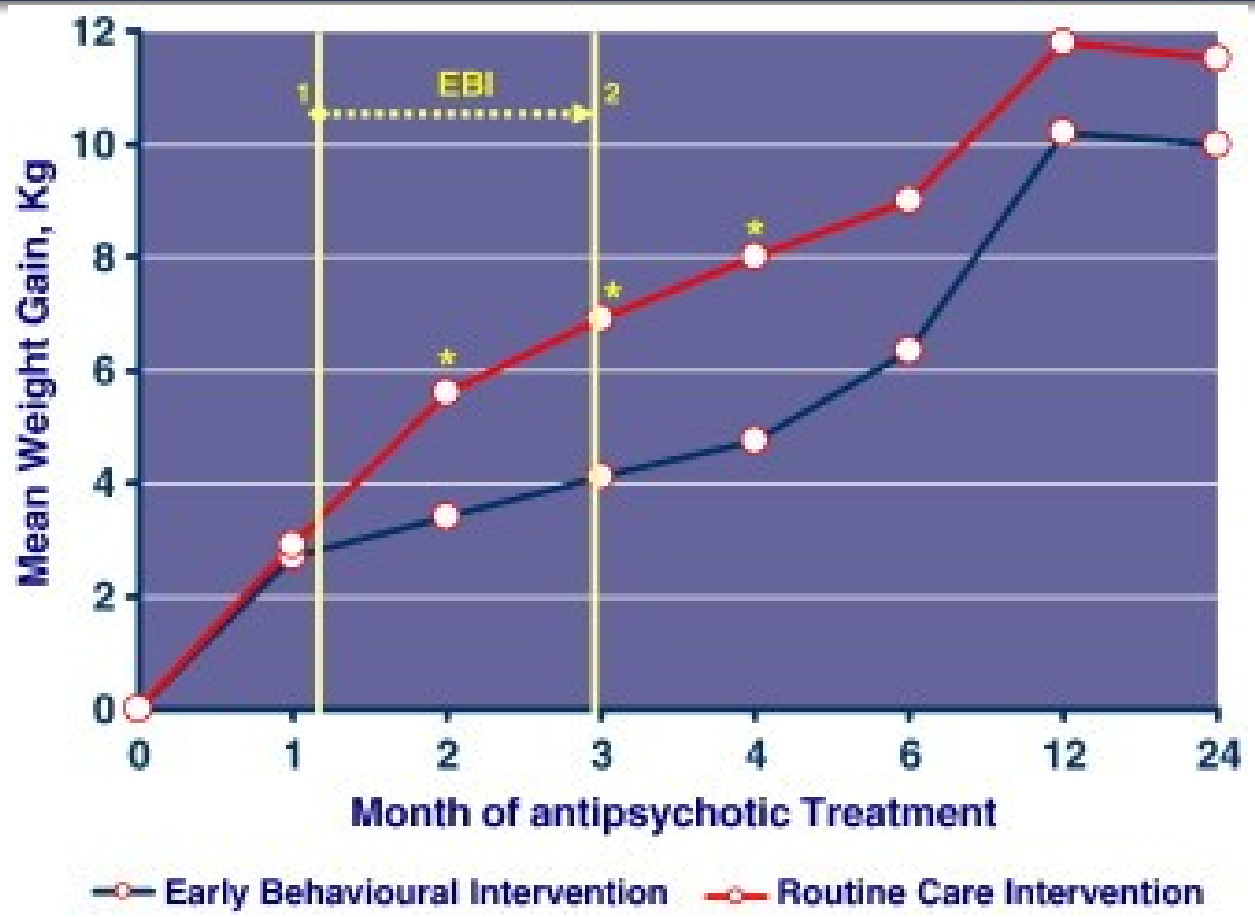
Gómez-Revuelta M, Pelayo-Terán JM, Juncal-Ruiz M, Vázquez-Bourgon J, Suárez-Pinilla P, Romero-Jiménez R, Setién Suero E, Ayesa-Arriola R, Crespo-Facorro B. Antipsychotic Treatment Effectiveness in First Episode of Psychosis: PAFIP 3-Year Follow-Up Randomized Clinical Trials Comparing Haloperidol, Olanzapine, Risperidone, Aripiprazole, Quetiapine, and Ziprasidone. Int J Neuropsychopharmacol. 2020 Apr 23;23(4):217-229. doi: 10.1093/ijnp/pyaa004. PMID: 31974576; PMCID: PMC7177160. https://academic.oup.com/ijnp/article/23/4/217/5715030

METABOLIC IMPACT – PLAYING THE LONG GAME

- PAFIP 10-year follow-up
  - Average 15 kg (33 lbs) increase in body weight at 10 years.
  - Rate of obesity in FEP 10 year follow up was 36.8% vs 15.8% in control group
  - Obesity/weight gain associated with insulin resistance, increased blood glucose and increased, increased insulin levels
  - Weight gain correlated to hyperlipidemia
  - Rapid weight gain in first year of treatment followed by slower consistent gain.

Vázquez-Bourgon J, Gómez-Revuelta M, Mayoral-van Son J, Labad J, Ortiz-García de la Foz V, Setién-Suero E, Ayesa-Arriola R, Tordesillas-Gutiérrez D, Juncal-Ruiz M, Crespo-Facorro B. Pattern of long-term weight and metabolic changes after a first episode of psychosis: Results from a 10-year prospective follow-up of the PAFIP program for early intervention in psychosis cohort. Eur Psychiatry. 2022 Aug 16;65(1):e48. doi: 10.1192/j.eurpsy.2022.2308. PMID: 35971658; PMCID: PMC9486831.

WEIGHT GAIN BY TIME WITH ANTIPSYCHOTICS



Alvarez-Jiménez M, Martínez-García O, Pérez-Iglesias R, Ramírez ML, Vázquez-Barquero JL, Crespo-Facorro B. Prevention of antipsychotic-induced weight gain with early behavioural intervention in first-episode psychosis: 2-year results of a randomized controlled trial. Schizophr Res 2010 Jan;116(1):16-9. doi: 10.1016/j.schres.2009.10.012. PMID: 19896336.

METFORMIN GUIDELINE NOW OFFICIAL

- Start Metformin for:
- All patient on olanzapine or clozapine
- For patients ages 10-25 years old on medium-risk antipsychotics (quetiapine, paliperidone or risperidone)
- For all patients with a cardiometabolic risk factor: BMI >25, Hypertension, dyslipidemia, pre-diabetes, diabetes
- All patients with antipsychotic if >3% increase in baseline body weight is observed during the first year of treatment with an antipsychotic

Carolan A, Hynes-Ryan C, Agarwal SM, Bourke R, Cullen W, Gaughran F, Hahn MK, Krivoy A, Lally J, Leucht S, Lyne J, McCutcheon RA, Norton MJ, O'Connor K, Perry BI, Pillinger T, Shiers D, Siskind D, Thompson A, O'Shea D, Keating D, O'Donoghue B. Metformin for the Prevention of Antipsychotic-Induced Weight Gain: Guideline Development and Consensus Validation. Schizophr Bull. 2024 Dec 9:sbae205. doi: 10.1093/schbul/sbae205. Epub ahead of print. PMID: 39657713.

WHAT DO YOU MEAN YOU'RE NOT TAKING YOUR MEDICATION?

RECOGNIZING SIGNS OF NON-ADHERENCE

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THE IMPORTANCE OF LANGUAGE

- Non-Adherence is now the preferred term over non-compliance
- Compliance and non-compliance denotes a hierarchical relationship with a power differential where the individual with psychosis is expected to stay in line, acquiesce, obey, etc…
- Non-Adherence:
  - recognizes other factors at play
  - Individual's have different levels of ability to take their medication consistently as prescribed.
  - Fits better within the model of "**shared decision making**"

APPROACH

- It is best to come from a place of interest, understanding, and collaboration.
- Aim to understand the barriers and or factors in place that are impacting the individual.
  - Our goal is to work together to problem solve ways to increase adherence.
- Providing solutions does not often work and therefore working with the individual to produce options if problem solving is needed.
- Ask questions and aim to be curious and not accusatory.
- What does the individual want out of treatment, not what doe we the clinician want out of treatment.

COMMON SIGNS OF NON-ADHERENCE

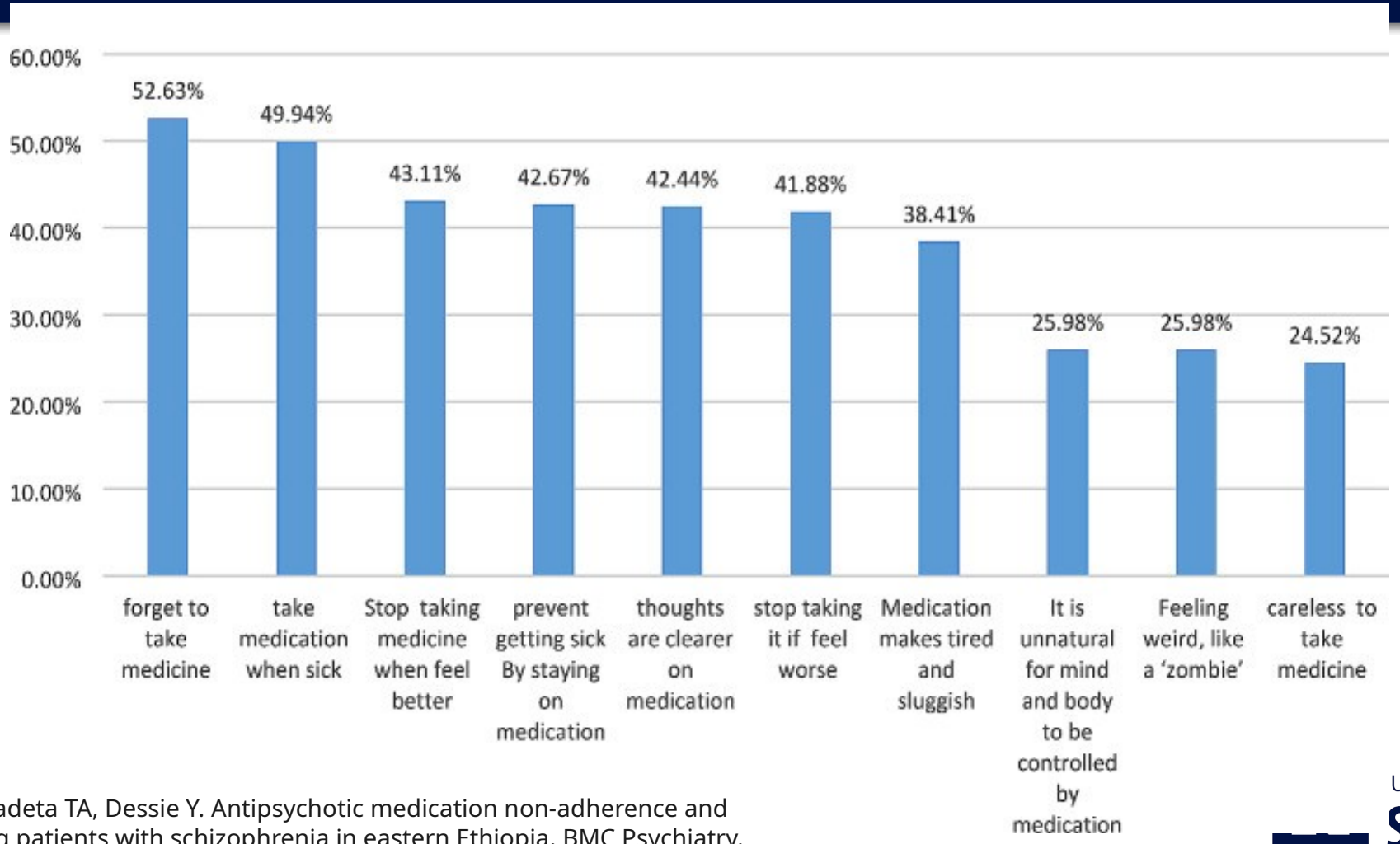
- Individuals seem to be doing worse out of the blue with or without stressors.
- Changes in behavior/attitude surrounding medications with clinician or family
  - Secrecy or defensiveness; not wanting to communicate or be open with family or team
- Concern for non-adherence when individuals are all of the sudden not experiencing side effects that were present or not experiencing expected side effects.
  - i.e. no weight gain on olanzapine despite weight gain the first couple of weeks
- Not filling prescriptions on time; not requesting refills timely
- Family concerns about changes, not engaging with activities

IMPORTANT FACTORS TO CONSIDER

- Increased risk of Non-Adherence
  - Age – Younger
  - Longer duration of untreated psychosis
  - Alcohol and Substance Use (Cannabis)
  - Untreated Comorbidities
  - Insight (or a lack of) to impactful symptoms
  - Attitude toward medications
  - Unemployment
  - History of physical abuse

Leclerc E, Noto C, Bressan RA, Brietzke E. Determinants of adherence to treatment in first-episode psychosis: a comprehensive review. Braz J Psychiatry. 2015 Apr-Jun;37(2):168-76. doi: 10.1590/1516-4446-2014-1539. Epub 2015 May 1. PMID: 25946398.

REASONS FOR NONADHERENCE TO ANTIPSYCHOTICS



Mohammed F, Geda B, Yadeta TA, Dessie Y. Antipsychotic medication non-adherence and factors associated among patients with schizophrenia in eastern Ethiopia. BMC Psychiatry. 2024 Feb 7;24(1):108. doi: 10.1186/s12888-024-05554-0. PMID: 38326836; PMCID: PMC10851518

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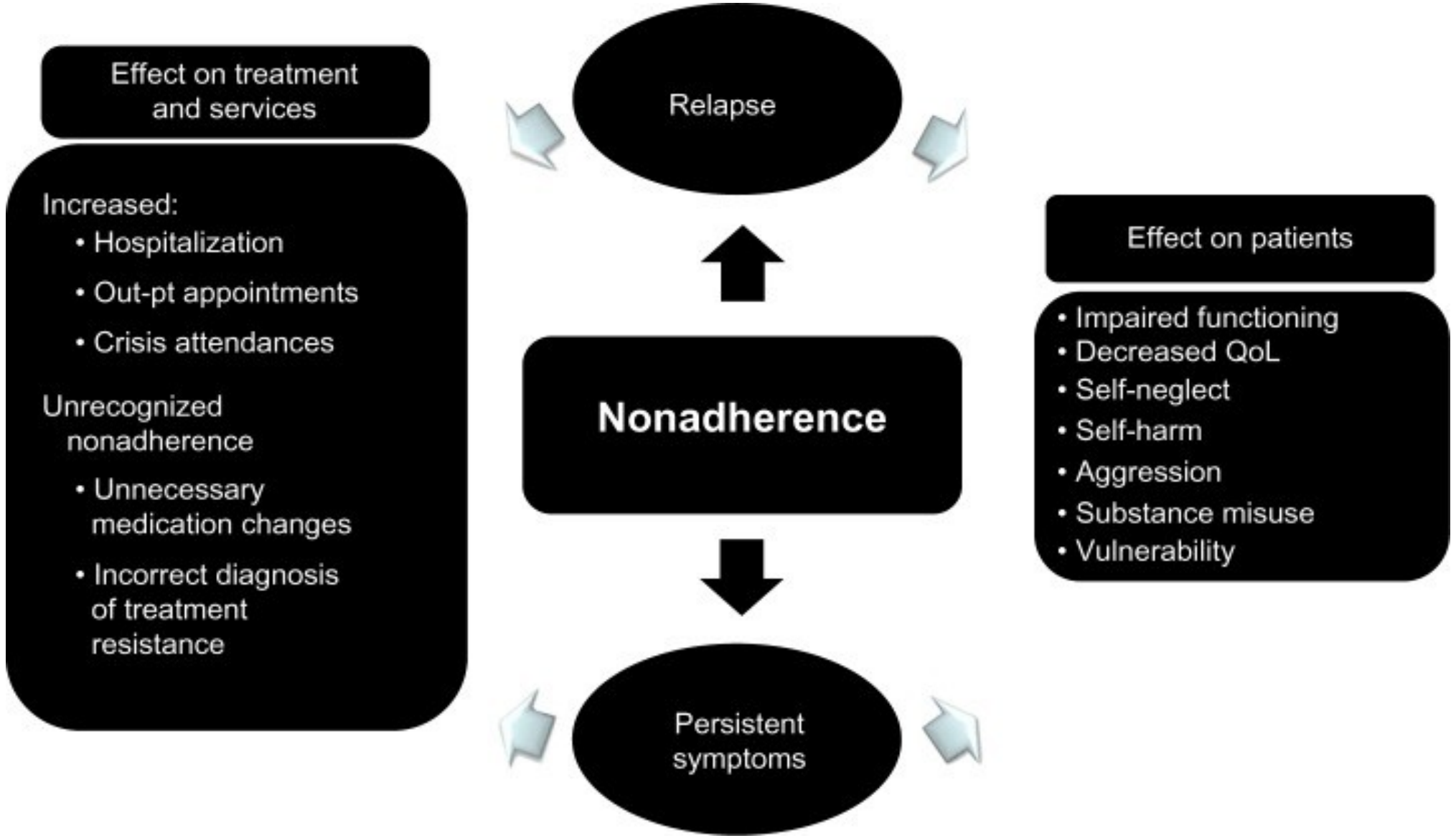

Haddad PM, Brain C, Scott J. Nonadherence with antipsychotic medication in schizophrenia: challenges and management strategies. Patient Relat Outcome Meas. 2014 Jun 23;5:43-62. doi: 10.2147/PROM.S42735. PMID: 25061342; PMCID: PMC4085309.

CONSEQUENCES?

- Readmission to hospital
- Relapse Rates of psychosis with nonadherence
  - 80% at 1-year
  - 96% at 2-years
- Worse long-term outcomes – chronic illness including positive, negative, and cognitive symptoms.

Hill M, Crumlish N, Whitty P, Clarke M, Browne S, Kamali M, Kinsella A, Waddington JL, Larkin C, O'Callaghan E. Nonadherence to medication four years after a first episode of psychosis and associated risk factors. Psychiatr Serv. 2010 Feb;61(2):189-92. doi: 10.1176/ps.2010.61.2.189. PMID: 20123826.

IT TAKES A VILLAGE

UTILIZING THE CSC TEAM: STRATEGIES, SHARED DECISION MAKING, AND WORKING WITH THE INDIVIDUAL

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STRATEGIES

- There are strategies that clinician can take that help with adherence.
- Individual strategies alone do not improve adherence but can provide information on ongoing adherence.
- A note as we discuss strategies:
- Participants in our programs must be engaged and in alliance with the clinician and team, wanting to take medication, and participating in improving adherence.
- The participant should have goals of treatment and values to work towards.
  - What do they want out of treatment?

INDIVIDUAL STRATEGIES FOR MONITORING

- Pill counts with the clinician
- Monitoring Prescription fill dates – are they filling monthly
- Blood levels of antipsychotics (2 data points required)

- Utilized when we have concerns about or non-adherence issues
- Need to build trust and engagement first and these should be tools aimed at helping.

MEDICATION OPTIONS FOR ADHERENCE

- **Minimize the complexity:**
- Less pills equals less opportunities to miss doses
- Dose the antipsychotic as one dose at bedtime.
  - This is standard approach to antipsychotics and most commonly used antipsychotics can be dose once per day at bedtime.
  - Metformin can be taken at bedtime with antipsychotics
- Long Acting Injectables
  - Empower the individual. Highlight how these can allow for taking control over their illness and life:
    - No pharmacy, no daily pills, easier planning for, trips, events, and social stigma.
    - Get your shot at your appointment.

ENGAGE THE PATIENT

- This takes the entire team!!
- There are individual things that can be done by the prescribing clinician but they need support for comprehensive interventions for nonadherence.

SHARED DECISION MAKING (SDM) IS NOT…

- SDM is not informed consent!

- Informed consent is providing all the information on benefits, side effects, and risks of treatment vs. non-treatment to receive individual's or parent/guardian's to consent to medication.
- Informed consent relies on information delivery in a unidirectional process.

- Shared Decision Making is..

SHARED DECISION MAKING IS…

- Working with the patient to have equal power in the relationship
- Working toward the patient having a role in making the decision
- Building autonomy and empowerment
- **We are partners in the treatment process**
- Requires an understanding of the medication options vs non treatment
- Requires an understanding of illness, prognosis, and expectations of what will change (symptoms and side effects) with medication.
- Allows the individual to actively participate in the decision process

INFORMED CONSENT

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SHARED DECISION MAKING

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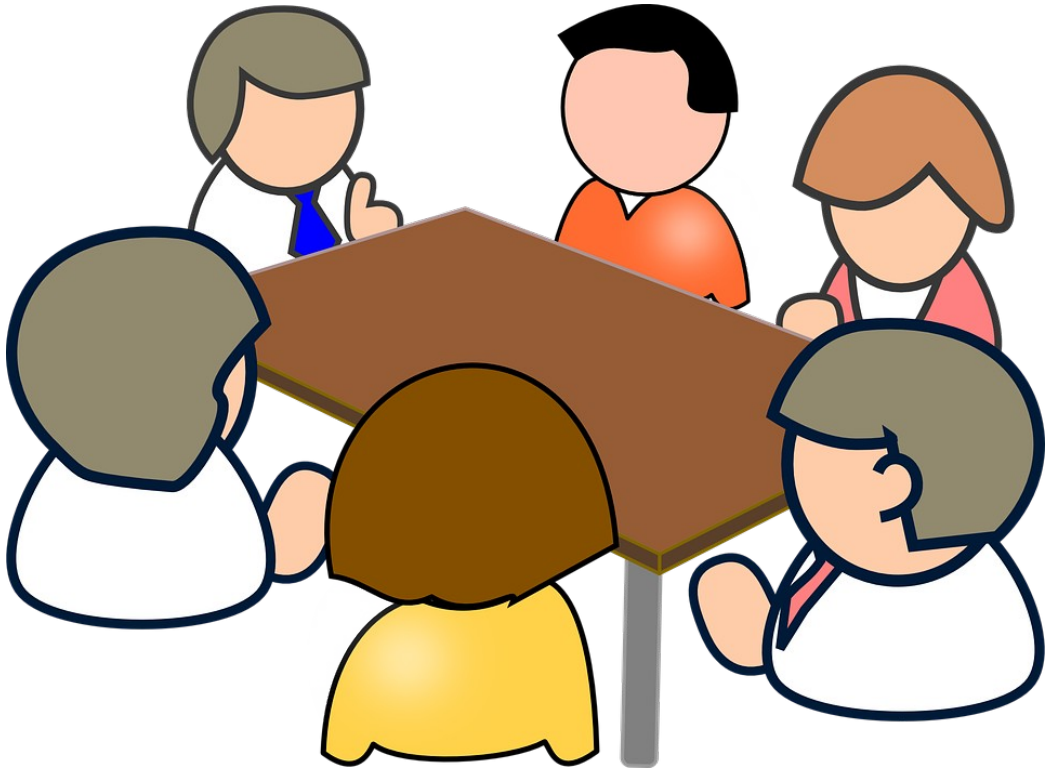
TREATMENT TEAM

- We all sit around the same table…
- With the same participant in our program…
- With the same goals…
- We all contribute to engagement and adherence…
- Each members role is needed.



UTILIZING THE TEAM: WHAT ROLES CAN THE CSC TEAM PLAY

- Psychiatric Clinician
  - Motivational Interviewing techniques; Follow-up on adherences, education, expectations, and outcomes; adherence strategies
- Individual Therapist
  - Goals and Values developed with patient in therapy; close follow-up and ongoing discussion of symptoms, motivational interviewing adherence strategies; illness insight
  - Communication skills → how to express goals to family and psychiatric clinician
- Family Education Therapist
  - Education on psychosis symptoms, prognosis, expectations; information from family on symptoms, behavior, and communication; autonomy building for patient. Handling difficult conversations and expectations.

UTILIZING THE TEAM: ROLES CONTINUED

- Case Manager:
  - Assistance with making appointments, picking up prescriptions, following-up with patient in advance of prescriptions
- Peer Support:
  - lived experience plays a massive role in helping to communicate benefits of staying on medications, providing support, and social engagement.
  - Don’t underestimate the power of understanding and connection.

UTILIZING THE TEAM: WHAT ROLES CAN THE CSC TEAM PLAY

- Supported Employment & Education:
  - are they meeting regularly and engaged, has there been changes in engagement (negative symptoms); noticing early and working with individual on what they are noticing.
- Wellness Nurse
  - Weight gain, coordination with primary care. Asks about medications and side effects. Often has a chance to talk to participant and gain valuable information. Seen as less focused on the medications resulting in patients being less defensive.

TREATMENT TEAM AND ADHERENCE

- The team meets weekly; adherence should be discussed including barriers that team member are seeing and reporting back to the team on adherence. Problem solving as a team on how to engage patient and produce solutions
  - **patient driven approach**
- Adherence relies on everyone in the team being aligned and having open, consistent communication
- The goal of increasing adherence relies upon
  - increasing alliance with the individual, being on the same page as a team, and deliver a consistent message.
- Education, Education, Education!!!!

ADHERENCE STRATEGIES FOR THE PATIENT

- Listen, listen, listen and pay attention to the individual's thoughts and concerns.
- Start early with adherence discussion. What will help them engage from the beginning.
- Relate discussion back to goals and values
- Identifying adherence barriers and collaborating to develop strategies that work.
- What does the individual think will help
- Communication on a loop

STRATEGY EXAMPLES

- Memory or forgetfulness:
  - set daily alarms/reminders
  - visual aids (notes/message in areas patient will see)
  - placing medications in a common area (kitchen)
  - texts or phone calls from someone
  - weekly pill organizer
- Engage the individual in problem solving. Provide examples or options if needed.

SUMMARY

- Adherence relies on many factors and takes the entire team to engage with a individual with psychosis
- Remember our goals of treatment for early psychosis which can be simplified to themes of decrease distress and symptoms; improve functioning; and improve long term health outcomes.
- Adherence begins with engagement and alignment with patient and for patient to provided autonomy and a voice in their treatment
- Education, expectations, communication and collaboration with the individual, family, and treatment team are central and key

COMING TOGETHER IS HARD WORK

PUTTING IT TOGETHER CASE EXAMPLE

University of Nevada, Reno
School of Medicine

MEET B

- B is a 20-year-old male who was admitted to the first episode psychosis program for a new diagnosis of schizophrenia.
- B had developed paranoia, auditory and visual hallucinations of the devil, and demonstrated significant negative symptoms including low motivation and low social engagement.
- B was admitted to the program and after experiencing side effects on aripiprazole, B was transitioned to risperidone and dose was titrated to 4 mg per day.

B DOES WELL INITIALLY

- B responded well to medication initially and his positive symptoms of psychosis improved.
- B demonstrated engagement with individual therapy and was participating with his family in family education and support sessions.
- Over the course of six to seven months, B showed improvement overall and progressed toward wanting to engage discussions surrounding work.
- After another couple of months, B was excited to share he had gotten a job at a warehouse.

MEDICATION SIDE EFFECTS

- While B tolerated risperidone he did experience moderate weight gain but was resistant to starting metformin for treatment.
- B decided he wanted to try and eat better and increase his exercise.
- He started going to the gym on a regular basis and working out with a trainer.
- With hard work B stopped gaining weight, but did not lose weight.
- He felt good about his progress and decided to continue with lifestyle approaches to his weight.

FAMILY CONCERNS START SMALL

- Everything seemed to be going well for B, and then…
- Family reported B was isolating more and seemed to be more secretive
- B reported everything was fine and he denied all symptoms.

SMALL THINGS ADDING UP

- The concerns about B being more isolative and secretive were reported back to the treatment team.
- It was discussed to monitor more closely and try to gain more insight into the concerns.
- At the next treatment team meeting:
  - Family Therapist reports that Family is concerned about moodiness and possibly some depression due to family being concerned about isolation and secretiveness. Some ”moodiness reported”
  - Individual therapist reports that B seemed “off” slightly. Described as slightly more quiet and less talkative, more in thought, and some increased latency.
- B still reporting thing are fine and denying symptoms/issues.

THINGS GET WORSE

- B's family continued to report concerns, but no reports of recurrence of psychosis. B reporting things are fine and continued to report adherence to medication.
- Fast forward another month and…
- B presents to psychiatry appointment with mother and grandmother
  - B abruptly quit his job saying it was not a good fit. He reports stress and "not feeling good" but denies positive symptoms
  - B seemed down and had less engagement but reported he was sad about losing the job.
  - Family reported B had not been sleeping well and seemed like moodiness got worse.
  - Discussed med and B reports adherence and feels they are working.

MORE TEAM INFORMATION

- Treatment Team continued to discuss B:
  - Therapist reports that B seemed internally distracted, less engaged, and the B reported less social engagement recently.
  - Fam Therapist reported that B's family had reported B was not at last session due to not sleeping well the night before. Family reports he was heard up in the middle of the night talking to himself, but when questioned he said he couldn't sleep and was playing video games.
  - SEE reports that B declined meeting with him after quitting his job.

  - Concerns increasing!!

RELAPSE OR STRESS WITH WORK?

- At next psychiatry appointment, discussed all the collected concerns with B.
- B reports that he quit work felt like he was messing up at work. He reports that he thought other people were talking about him and making negative comments about him messing up.
- B states that it was just the stress with work and feels like quitting work would help.
- Discussed ongoing concerns from family and team even though patient quit working.
- B reports things are fine and he doesn't want to change medications.

NON-ADHERENCE FORMALLY COMES UP

- Therapist reports that B has not been taking his medications.
- B reported that he felt like he was doing well and felt he did not need his medications anymore because he was doing well.
- Therapist reports that B is still denying issues despite family concerns and concerns for paranoia at work.
- Concerns discussed and family therapist finds family found partially filled medication bottles in B's room.
- B reports that he didn't want to make changes to medications since he did not need them in the first place

WORKING TOWARDS MORE INFORMATION

- Multiple team members continued to work with B on medication adherence discussions.
- Therapist discussed values and goals of treatment. Revisited education on psychosis and symptoms.
- Family therapist worked with B and family on highlighting positive engagement B had when taking medications and what family has noticed since stopping.
- SEE meet with B to discuss working and impact of not taking medication on motivation, memory and thinking with trying to reapply for jobs

NEW INFORMATION AND INSIGHT

- Over a few months the conversations continued. Now 3-4 months since not being adherent to medications,
- Therapist finds out that B decided to stop taking medications because he did not want other people to know about his illness and that he had to take pills.
- He tells our nurse that people made comments about his weight gain which led to feelings of shame and affected his self-esteem.
- He reported in psychiatry appointment that people will think ”I’m crazy or a freak” and “since I have gained weight they will know.”
- B has noticed he is not motivated, has not been socializing, and is missing the activities he was doing. He states he wants to work.

GETTING BACK ON TRACK

- With support from the team and providing education again, B decided to restart risperidone eventually agreeing to a long acting injectable.
- B also agreed to start metformin at the beginning of restarting risperidone. Some weight loss had occurred during the time he was off medications, but not back to baseline.
- With LAI and metformin B did well on medications with limited weight gain and ended up with good control of symptoms and stable weight.

IMPORTANT NOTES ON B'S COURSE

- Working with B required all members of the team, took **several months** of work, and working toward things that were important to B.
- B was closed off and team members had to work to find things that were important to B.
- A unified message was delivered by the treatment team by continuing to highlight the importance of medications, how well he had done on medications, specific benefits that were noticed in B, and noting both family and team concerns.
- Finding the underlying reason was important to addressing non-adherence and re-engaging B in taking medications

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QUESTIONS?