



## CRITICAL ANALYSIS OF THE PSYCHOLOGICAL FACTORS INFLUENCING PATIENT ADHERENCE TO MEDICAL TREATMENT PLANS.

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### Abstract

Patient adherence is an integral element of treatment plans and assists in attaining desirable health goals. However, many psychological factors exist, resulting in complex adherence behaviors that challenge healthcare professionals, thus making the work of healthcare providers difficult. This paper critically explores the psychological determinants of patient compliance with medical treatment regimens by conducting a thorough literature review, elaborating on the methods used, and expounding on the results. The main findings highlight the role of belief status, attitude or motivation, self-efficacy, and social help in determining adherence behaviors. Secondly, this work also examines the effects of psychological treatments and several techniques used to elevate patient compliance. The talk revolves around personalized attitudes and mutually shared responsibility between patients and the health care team, allowing optimal medical plan adherence.

**Keywords:** Psychological Factors, Patient Adherence, Medical Treatment Plans, Beliefs, Attitudes, Self-Efficacy, Motivation, Social Support.

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## Introduction

Patient compliance with their medical treatment plans is necessary to achieve great health results and maximize the efficacy of therapeutic interventions. Various psychological factors can indeed affect patients' adherence, and as a result, they sometimes fail to apply treatments accordingly. Healthcare professionals need to grasp the dynamics of psychological factors, form personalized therapeutic approaches, and support tactics that significantly contribute to better patient adherence. This paper is intended to critically evaluate the psychologically damaging factors that affect patient adherence to the treatment plans provided by all the practitioners while providing ways through which adherence can be influenced and improved, thereby enhancing health outcomes (Philip & Cherian 2020).

## Literature Review

Medical treatment plan adherence among patients today is affected by various psychological elements, including perception, feelings, self-efficacy, motivation, and social support. This literature review, however, emphasizes these critical psychological factors that influence adherence behavior and the projected consequences for healthcare practices.

### *Beliefs and Attitudes*

Patients' illness beliefs, how effective treatment is seen, and what benefits and barriers are envisaged are all about patients' adherence behaviors. People with positive attitudes and beliefs about treatment are likelier to adhere to regimens they perceive as helpful and practical. The lowered probability of adherence is typical of patients with a negative perception of therapy. It is essential to accentuate the positive beliefs and remove all the misconceptions and negative thoughts to strengthen adherence to the treatment plan. Any unreasonable concerns or doubts might undermine adherence and result in patients choosing to let go or change their treatment plan.

For instance, someone can say that the medication is useless or not required; as a result, this can cause them to skip their doses or even stop the treatment too soon. Healthcare practitioners need to focus on the beliefs and attitudes of patients by interacting with them well and making them aware through education. This way, they can correct misconceptions and reinforce positive thoughts toward treatment (Philip & Cherian 2020).

### *Self-Efficacy:*

Trust in oneself, which refers to patients' belief in their ability to adhere to treatment rules, is the critical predictor of adherence practices. In that case, this aspect is of greater importance. When a patient is more empowered, he is more likely to overcome obstacles and stick with their treatment, even during hard times. On the other hand, low confidence can cause one to feel uncertain, which might result in no adherence and a lack of good health practices.

The healthcare staff assists patients in developing self-efficacy by using simple strategies like giving instructions, setting small, achievable objectives, and providing positive feedback. On the other hand, health professionals can impart self-confidence to patients and make them realize that they can manage the treatment to a great extent. As a result, the patients will be empowered to take an active part in their care, and thus, the adherence outcomes can be improved.

### *Motivation*

Motivation makes a galvanizing contribution to patient adherence, and intrinsic motivation, compared to extrinsic motivation, offers a more robust solution. Intrinsic motivation centers on personal values, objectives, or interests. It is a more profound desire to conduct treatment because of its total value, not just to comply with the treatment regime. Patients who are intrinsically motivated are highly inclined to abide by taking their medications consistently since they experience satisfaction and happiness from being compliant with their medication plans.

However, a contrasting view is that intrinsic motivation, which originates from the inside due to other external rewards, is shorter than extrinsic motivation in sustenance and maintenance. For instance, those who depend on extrinsic motivation while adhering to the recommended diet may be more likely to falter because they no longer receive any external rewards when the designated motivators have been removed. Healthcare providers can put this inner desire into motion by assisting the patients in discovering what is valuable to them in life and setting goals within their health and lifestyle. By matching the treatment to the patient's aspirations, the healthcare providers will likely fabricate a sense of meaning and purpose to ensure patients adhere to the therapies even in the long term.

**Social Support**

Family members, caregivers, and healthcare providers are involved in supporting adherence behaviors, and this role is crucial to patients' grammar. Transform the given sentence into a passive voice, maintaining the meaning and flow of the sentence. Patients who believe they get sufficient social support are more likely to adhere to their treatments because they receive much emotional encouragement, support, and help from their social circle.

The network of family members and caregivers constitutes a valuable resource where emotional support and aid, such as medication management or appointment reminders, can be provided. Furthermore, healthcare providers are positioned to educate the patients on the issues, guide them, reassure them, and offer resources that will enable them to overcome obstacles and persevere in their treatment regimen. The health care settings that develop supportive environments for active dialogue and teamwork have the potential for social support that positively impacts patient adherence and treatment outcomes.

Psychological expression are recognized by beliefs, attitudes, self-efficacy, commitment, and societal support in adherence to a medical course of action. Identifying these elements that play a role in adherence activities will be what healthcare providers need to do to plan, create, or implement customized interventions and support approaches

that will lead to a better adherence outcome. Because healthcare personnel tackle patients' beliefs, teach self-efficacy, enable internal motivation, and mobilize social support, patients can take an active role in their treatment and hence get favorable treatment results.

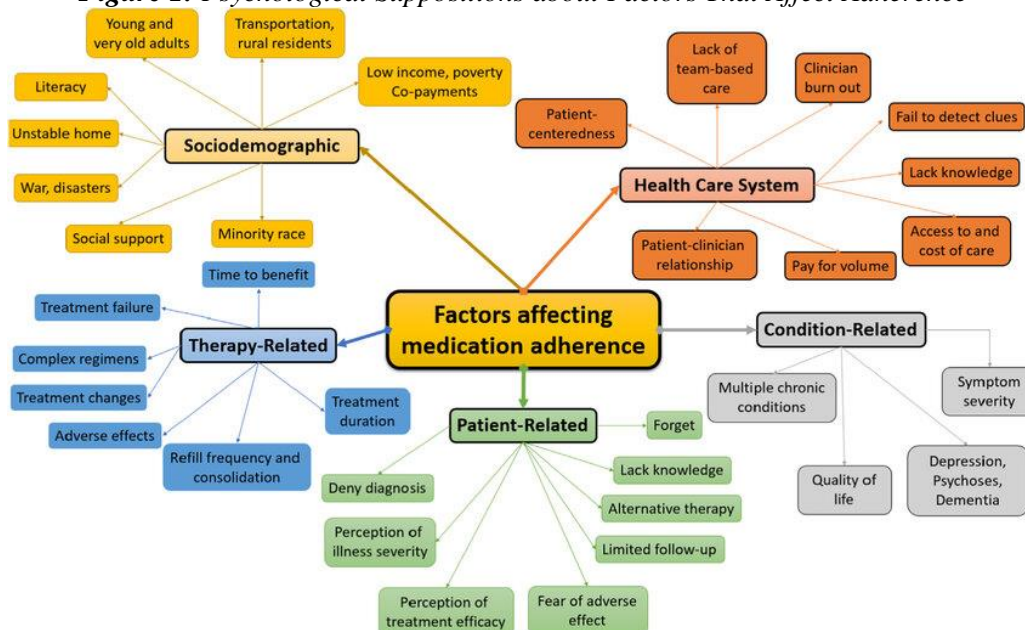
**Methods**

The methods involved a complete literature synthesis of research on psychological elements of patients' compliance with therapy and diagnosis regimes. The papers indexed in electronic databases such as PubMed, PsycINFO, and Google Scholar expressed as sensibly as possible using keywords of 'patient adherence,' 'psychological factors,' 'beliefs,' 'attitudes,' 'self-efficacy,' 'motivation,' self-efficacy, 'motivation,' and 'social support' within the last decade of 2000 were included in qualitative and quantitative research. Data retrieval and information search were employed to uncover the main findings, the trends, and the practice implications in the healthcare field.

**Results**

The literature review results have brought to the fore the decisive role of psychological factors regarding medical patient adherence to treatment prescriptions. Figure 1 is a model that illustrates the circular interactions between these psychosocial conditions and patient adherence behavior.

**Figure 1: Psychological Suppositions about Factors That Affect Adherence**



(Philip & Cherian 2020).

The review identified several key findings regarding the impact of specific psychological factors on patient adherence: The review identified

several key findings regarding the effects of specific psychological factors on patient adherence:

1. **Beliefs and Attitudes:** Along with patients' mental state about the illness and treatment and attitudes concerning the medication, a considerable role is being played in patients' treatment observance. Patients with a strong belief in diabetes do better at compliance. However, people with opposing beliefs regarding diabetes may not do as well because of their attitudes. A patient with a genuine belief in the power of their medications, both in terms of effectiveness and benefits, is much more likely to follow their treatment schedule than a patient with doubts or misconceptions about using medicines.
2. **Self-Efficacy:** The confidence patients possess in their power to follow treatment regimens, or the self-efficacy level, proves to be the central factor determining such individuals' adherence behaviors. A higher self-image of patients denotes successful remedy adherence. Patients with high self-efficacy are much more willing to solve problems and to keep sticking to the treatment regimens, even if something happens and they fail. On the contrary, patients with low self-efficacy may have difficulties adhering to treatment plans, as they would have the impression that they lack the skills to master their health.
3. **Motivation:** The intrinsic motive, characterized by a person's values and goals, tends to ensure the permanence of adherence behaviors much more than the extrinsic code. The ones who are motivated in the right way to be faithful as part of their treatment have the highest chances to stop, despite the obstacles that may occur along the treatment regimen. Intrinsic motivation arises from a genuine desire to sustain health and achieve personal objectives, which is a strong force that strengthens adherent practices. On the other hand, intrinsic motivation, dependent on the inner drive or urge, may be more effective in sustaining motivation. In contrast, extrinsic motivation, whose agents are external rewards or pressures, may be unable to maintain this.
4. **Social Support:** Social assistance from all family members, caregivers, and health professionals can automatically improve patients' compliance behavior by encouraging, assisting, and making it easy for their medical care. Psychosocial support is known to be effective. Patients who perceive more excellent social support are most likely to comply with their treatment and thus successfully deal with their disease. The disease is often controlled or even cured through emotional, informational, and instrumental

support given by the patients' social networks. Family members and caregivers show a critical stance, supplying comfort and assistance with a schedule of medication, reminder appointments, and driving to the healthcare center. One of the significant ways healthcare professionals support socialism is through providing support and guidance to patients (El Abdellati et., al 2020). This involves offering encouragement and reassurance and providing the patients with resources aimed at helping them overcome any challenges and difficulties in following the instructions prescribed by the care provider.

This review article points out the essential role of psychological parameters in successful treatment compliance. Many elements, including a belief system, a way of thinking, self-esteem, motivation, and social support, are associated with compliance, which impacts the ability to stick with the prescribed treatment consistently. Being aware of such factors and the respective implications of such behaviors on adherence is crucial. In this line, healthcare providers must develop interventions and strategies tailored to create the desired outcome. Through socialization, enhancing a patient's self-efficacy rather than delegation, allowing the patient to find internal motivation, and using social support, healthcare providers can educate and guide the patient in a way devoted to independent care, leading to successful treatment outcomes.

### Discussion

The study's results highlight the psychological factors affecting the patient's disposition to medication therapy. Aspects like beliefs, attitudes, self-efficacy, motivation, and healthcare team support are all crucial in designing and shaping how patients follow healthcare recommendations, highlighting that this behavior is multifactorial. These psychological elements are essential because healthcare staff will be equipped to apply customized interventions and supportive strategies to increase patients' treatment adherence.

### Complex Interplay of Psychological Factors

The nature and degree of a belief and an attitude towards illness and related treatment variations strongly determine the type and amount of drug adherence behaviors. Patients' comprehension of the information and adherence to the treatment regimen will likely be successful. Whereas misconceptions and negative beliefs can hinder adherence, a patient who regards his or her medication as applicable and healing is more likely

to complete the treatment scheme in compliance with recommendations, unlike a patient who cannot accept the fact that the drugs are effective.

Self-efficacy, which is about patients believing that they can adhere to treatment and that it is worthwhile, acts as a very influential actor when it comes to adhering to behaviors. People with high self-efficacy are more suited to surpass the obstacles and continue to use their treatment plans. In contrast, individuals with low self-efficacy find it more challenging to apply the regimes without assistance. The healthcare team can build up patients' belief in their capacity to self-care because of empowerment tools like setting goals and the inclusion of skill-building exercises, which boost their confidence in managing their health.

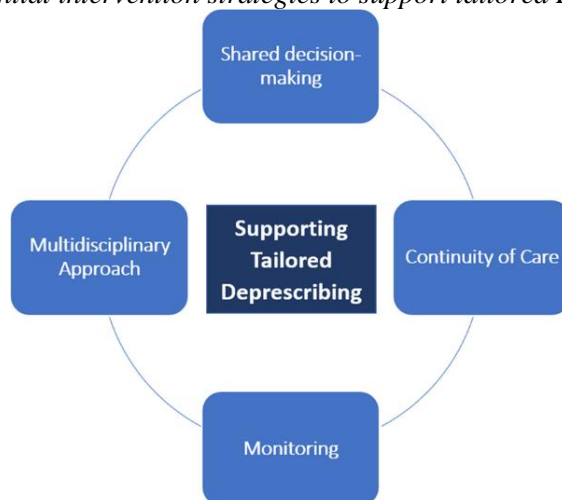
Motivation is a force that pushes players into actions to adhere to behavior with internal motivation only rather than any external one. Self-driven patients, who are intimately attached to performing recommended treatments by their true beliefs and objectives, were proven to be more competent, persistent, and healthy. However, internal factors have also been proven to stand in for external rewards; intrinsic goals that rely on

external pressures or incentives may be less sustainable over the long term(Menditto et.,al 2020).

Unearthing social support from family members, caregivers, and health professionals also plays a strategic role in fostering this position. Patients who view social support as more important are more likely to accept the therapy as they attend to their emotional needs and provide physical help and assistance to their social circle. Family members and caregivers can give you the emotional support you need; they also assist with taking medication. On the other hand, healthcare providers give you the medical guidance you need, you get the medical reassurance, and you get the resources you need to navigate the challenges.

**Tailored Interventions and Support Strategies:** Extensive knowledge about psychological variables helps healthcare professionals correctly design their strategies and management planning, leading to enhanced patient responsibility. Personalized interventions addressing every patient according to their healthcare demands, inclinations, attitudes, beliefs, self-efficacy, and motivation allow maximum adherence.

**Figure:** Potential intervention strategies to support tailored DE prescribing



(Smelt et.,al 2020).

Providers of healthcare services, together with patients, can develop shared decisions and make sure that their ideologies and convictions are not disapproved. Evidence-based information and education should be provided to facilitate clear communication, influence change in attitudes of misconception, and promote faith in the treatment's effectiveness. Not only that but the mentioned strengthening training activities promote the patients' self-esteem and lead them to practice prescribed treatment plans

As a result, the ability to rely on social support networks could lead to an individual consistently sticking to health-promoting behaviors. People from healthcare industries could talk with family members and make arrangements that would enable them to be part and parcel of treatment conversations to fill the supportive roles for their patients as they rely on adherence. Through peer help meetings and other means of community assistance, we will include a forum where people can chat with each other and share their personal stories.

## Conclusion

To sum up, the psychological aspects determine the patients' persistence regarding the prescribed treatments. These include beliefs, alignment, motivation, self-efficacy, and social support. All these factors are of substantial importance in maintaining patients' commitment to the therapeutic plans prescribed to them. Healing through the understanding of psychological components and personalized interventions enables medical professionals to bring treatment effectiveness and patient adherence to the highest level (Alhazami et.,al 2020).

## Recommendation

- Strive to complete an inventory of patients' perceptions, attitudes, self-efficacy, goals, and support to shed light on adherence-related barriers.
- Motivational interviewing, being a part of the procedure, would empower the patients' internal motivation and ability to the maximum (Kvarnström et.,al 2021).
- Provide training and support to family members and caregivers to develop a culture of privacy and respect that facilitates patients' treatment and recovery.
- Technology-based interventions such as mobile health apps and telemedicine platforms should allow the patients to communicate with the doctor and monitor the patient's compliance behavior.

By including psychological conditions recognizance and treatment programs, health professionals may persuade patients to understand them and thus improve health and quality of life outcomes.

## Reference

1. Kvarnström, K., Westerholm, A., Airaksinen, M., & Liira, H. (2021). Factors contributing to medication adherence in patients with a chronic condition: a scoping review of qualitative research. *Pharmaceutics*, *13*(7), 1100. <https://www.mdpi.com/1999-4923/13/7/1100>
2. Jacob, C., Sezgin, E., Sanchez-Vazquez, A., & Ivory, C. (2022). Sociotechnical factors affecting patients' adoption of mobile health tools: systematic literature review and narrative synthesis. *JMIR mHealth and uHealth*, *10*(5), e36284. <https://mhealth.jmir.org/2022/5/e36284>
3. Alexandre, K., Campbell, J., Bugnon, M., Henry, C., Schaub, C., Serex, M., ... & Peytremann-Bridevaux, I. (2021). Factors influencing diabetes self-management in adults: an umbrella review of systematic reviews. *JBIC evidence synthesis*, *19*(5), 1003-1118. [https://journals.lww.com/jbisrir/fulltext/2021/05000/Factors\\_influencing\\_diabetes\\_self\\_management\\_in.5.aspx?context=FeaturedArticles&collectionId=2](https://journals.lww.com/jbisrir/fulltext/2021/05000/Factors_influencing_diabetes_self_management_in.5.aspx?context=FeaturedArticles&collectionId=2)
4. Wang, H., Yao, F., Wang, H., Wang, C., & Guo, Z. (2022). Medication adherence and influencing factors among patients with severe mental disorders in low-income families during COVID-19 outbreak. *Frontiers in Psychiatry*, *12*, 799270. <https://www.frontiersin.org/articles/10.3389/fpsyt.2021.799270/full>
5. El Abdellati, K., De Picker, L., & Morrens, M. (2020). Antipsychotic treatment failure: a systematic review on risk factors and interventions for treatment adherence in psychosis. *Frontiers in neuroscience*, *14*, 531763. <https://www.frontiersin.org/journals/neuroscience/articles/10.3389/fnins.2020.531763/full>
6. Jakob, R., Harperink, S., Rudolf, A. M., Fleisch, E., Haug, S., Mair, J. L., ... & Kowatsch, T. (2022). Factors influencing adherence to mHealth apps for prevention or management of noncommunicable diseases: systematic review. *Journal of Medical Internet Research*, *24*(5), e35371. <https://www.jmir.org/2022/5/e35371/>
7. Alhazami, M., Pontinha, V. M., Patterson, J. A., & Holdford, D. A. (2020). Medication adherence trajectories: a systematic literature review. *Journal of managed care & specialty pharmacy*, *26*(9), 1138-1152. <https://www.jmcp.org/doi/abs/10.18553/jmcp.2020.26.9.1138>
8. Smelt, H. J., Pouwels, S., Smulders, J. F., & Hazebroek, E. J. (2020). Patient adherence to multivitamin supplementation after bariatric surgery: a narrative review. *Journal of nutritional science*, *9*, e46. <https://www.cambridge.org/core/journals/journal-of-nutritional-science/article/patient-adherence-to-multivitamin-supplementation-after-bariatric-surgery-a-narrative-review/3AFBF02EA8242E4EAADCCBA31AD0BBF7>
9. Piña, I. L., Di Palo, K. E., Brown, M. T., Choudhry, N. K., Cvengros, J., Whalen, D., ... & Johnson, J. (2021). Medication adherence: importance, issues and policy: a policy statement from the American Heart

- Association. *Progress in cardiovascular diseases*, 64, 111-120.  
<https://www.sciencedirect.com/science/article/pii/S0033062020301559>
10. Pirri, S., Lorenzoni, V., & Turchetti, G. (2020). Scoping review and bibliometric analysis of Big Data applications for Medication adherence: an explorative methodological study to enhance consistency in literature. *BMC Health Services Research*, 20, 1-23.  
<https://link.springer.com/article/10.1186/s12913-020-05544-4>
  11. Maffoni, M., Traversoni, S., Costa, E., Midão, L., Kardas, P., Kurczewska-Michalak, M., & Giardini, A. (2020). Medication adherence in the older adults with chronic multimorbidity: a systematic review of qualitative studies on patient's experience. *European geriatric medicine*, 11, 369-381.  
<https://link.springer.com/article/10.1007/s41999-020-00313-2>
  12. Menditto, E., Orlando, V., De Rosa, G., Minghetti, P., Musazzi, U. M., Cahir, C., ... & Almeida, I. F. (2020). Patient centric pharmaceutical drug product design—The impact on medication adherence. *Pharmaceutics*, 12(1), 44.  
<https://www.mdpi.com/1999-4923/12/1/44>
  13. Philip, J., & Cherian, V. (2020). Factors affecting the psychological well-being of health care workers during an epidemic: a thematic review. *Indian Journal of Psychological Medicine*, 42(4), 323-333.  
<https://journals.sagepub.com/doi/abs/10.1177/0253717620934095>
  14. Hall, G. L., & Heath, M. (2021). Poor medication adherence in African Americans is a matter of trust. *Journal of racial and ethnic health disparities*, 8(4), 927-942.  
<https://link.springer.com/article/10.1007/s40615-020-00850-3>
  15. Kaplan, A., & Price, D. (2020). Treatment adherence in adolescents with asthma. *Journal of asthma and allergy*, 39-49.  
<https://www.tandfonline.com/doi/abs/10.2147/JAA.S233268>
  16. Xu, H. Y., Yu, Y. J., Zhang, Q. H., Hu, H. Y., & Li, M. (2020). Tailored interventions to improve medication adherence for cardiovascular diseases. *Frontiers in pharmacology*, 11, 510339.  
<https://www.frontiersin.org/articles/10.3389/fphar.2020.510339/full>
  17. Babel, A., Taneja, R., Mondello Malvestiti, F., Monaco, A., & Donde, S. (2021). Artificial intelligence solutions to increase medication adherence in patients with non-communicable diseases. *Frontiers in Digital Health*, 3, 669869.  
<https://www.frontiersin.org/articles/10.3389/fdgth.2021.669869/full>
  18. He, S., Wang, Y., Zhao, X., Xu, F., Li, J., Huang, T., ... & He, S. (2022). Factors influencing delayed treatment in patients with breast cancer during COVID-19 pandemic. *Frontiers in public health*, 10, 808873.  
<https://www.frontiersin.org/articles/10.3389/fpubh.2022.808873/full>
  19. Stefanakis, M., Batalik, L., Papathanasiou, J., Dipla, L., Antoniou, V., & Pepera, G. (2021). Exercise-based cardiac rehabilitation programs in the era of COVID-19: a critical review. *Reviews in cardiovascular medicine*, 22(4), 1143-1155.  
<https://www.imrpress.com/journal/RCM/22/4/10.31083/j.rcm2204123/htm>
  20. Kretchy, I. A., Koduah, A., Ohene-Agyei, T., Boima, V., & Appiah, B. (2020). The association between diabetes-related distress and medication adherence in adult patients with type 2 diabetes mellitus: a cross-sectional study. *Journal of diabetes research*, 2020.  
<https://www.hindawi.com/journals/jdr/2020/4760624/>
  21. Luo, A., Qin, L., Yuan, Y., Yang, Z., Liu, F., Huang, P., & Xie, W. (2022). The effect of online health information seeking on physician-patient relationships: systematic review. *Journal of Medical Internet Research*, 24(2), e23354.  
<https://www.jmir.org/2022/2/e23354/>
  22. Obeagu, E. I., Anyanwu, C. N., & Obeagu, G. U. (2024). Challenges and Considerations in Managing Blood Transfusion for Individuals with HIV. *Elite Journal of HIV*, 2(2), 1-7.  
[https://www.researchgate.net/profile/Emmanuel-Obeagu/publication/378856593\\_Challenges\\_and\\_Considerations\\_in\\_Managing\\_Blood\\_Transfusion\\_for\\_Individuals\\_with\\_HIV/links/65ed6b9d59ab2af0ef8ac80be/Challenges-and-Considerations-in-Managing-Blood-Transfusion-for-Individuals-with-HIV.pdf](https://www.researchgate.net/profile/Emmanuel-Obeagu/publication/378856593_Challenges_and_Considerations_in_Managing_Blood_Transfusion_for_Individuals_with_HIV/links/65ed6b9d59ab2af0ef8ac80be/Challenges-and-Considerations-in-Managing-Blood-Transfusion-for-Individuals-with-HIV.pdf)
  23. Huang, Y. M., Pecanac, K. E., & Shiyanbola, O. O. (2020). "Why am I not taking medications?" Barriers and facilitators of diabetes medication adherence across different health literacy levels. *Qualitative Health Research*, 30(14), 2331-2342.

<https://journals.sagepub.com/doi/abs/10.1177/1049732320945296>

24. Thapa, D. K., Visentin, D. C., Kornhaber, R., West, S., & Cleary, M. (2021). The influence of online health information on health decisions: A systematic review. *Patient education and counseling*, 104(4), 770-784. <https://www.sciencedirect.com/science/article/pii/S0738399120306406>
25. Peh, K. Q. E., Kwan, Y. H., Goh, H., Ramchandani, H., Phang, J. K., Lim, Z. Y., ... & Thumboo, J. (2021). An adaptable framework for factors contributing to medication adherence: results from a systematic review of 102 conceptual frameworks. *Journal of general internal medicine*, 36, 2784-2795. <https://link.springer.com/article/10.1007/s11606-021-06648-1>