

Consumer behavior analysis of various NDDS: Long Acting Injections and Neuropathic Nanogels

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Introduction

NDDS are advanced drug delivery systems designed to improve upon traditional methods like pills or injections. NDDS offer several advantages, including:

- Targeted drug delivery
- Controlled drug release
- Enhanced bioavailability
- **Long-Acting Injections (LAIs):** LAIs are a type of injectable NDDS that release medication slowly over a period of weeks or months. This can be beneficial for patients who have difficulty taking medication regularly or for medications that need to be maintained at a consistent level in the body.
- **Nanogels:** Nanogels are microscopic gel particles that can be used to deliver drugs directly to cells. They can be engineered to target specific tissues and release their payload in response to certain triggers. Nanogels hold promise for improved treatment of various diseases, including neuropathic pains.

Research Objective

- Evaluate the level of awareness among consumers regarding long-acting injections and neuropathic nanogels.
- Analyze consumer perceptions of these NDDS in terms of efficacy, safety, convenience, and overall appeal compared to traditional drug delivery methods.
- Assess the cost-effectiveness of long-acting injections and neuropathic nanogels from a consumer perspective.
- Explore issues related to accessibility and affordability of these advanced drug delivery systems, particularly in different socio-economic settings.

Methodology adopted

- A market survey assessing perceptions of health practitioner's regarding NDDS was developed in the form of physical multiple choice questionnaires.
- Survey questions collected demographic information, percentage of their patients they believe to be willing to use LAI's and the impact of various barriers to LAI's use.
- Participation was completely voluntary, and responses were kept confidential.

Results

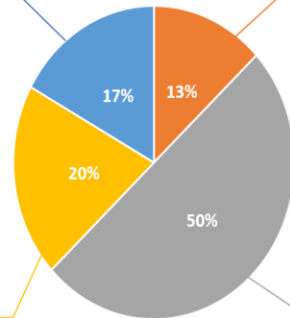
- Total of 76 Psychiatrists, Neurologists and Consultant Physicians were contacted to complete the survey.
- Yielding a response rate of 76.6% i.e 58 healthcare professionals have participated in this survey.
- Out of which 46% were psychiatrist, 29% were neurologists and 24% were consultant physicians.

Survey Result Of Long Acting Injections (LAI'S):

Q. What percentage of your patients with schizophrenia experience non-adherence to oral antipsychotics?

17% says around **10%** of their patients with schizophrenia experience non-adherence to oral anti-psychotics

20% says around **30%** of their patients with schizophrenia experience non-adherence to oral anti-psychotics

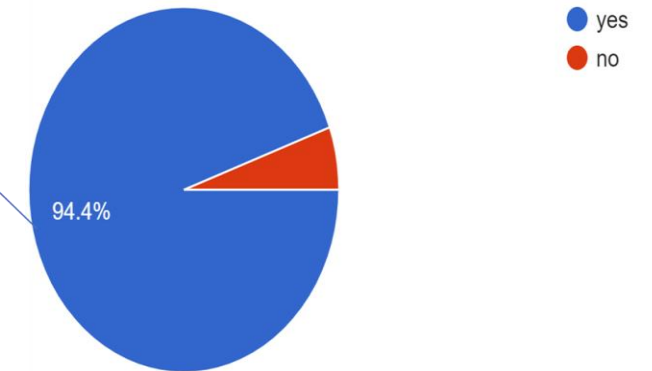


13% says around **40-50%** of their patients with schizophrenia experience non-adherence to oral anti-psychotics

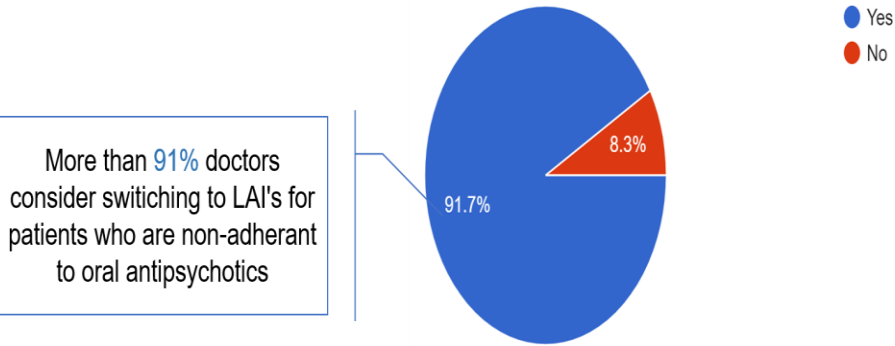
50% says around **20%** of their patients with schizophrenia experience non-adherence to oral anti-psychotics

Q. Do you agree that long acting injections significantly improves the treatment adherence in schizophrenia and bipolar disorders?

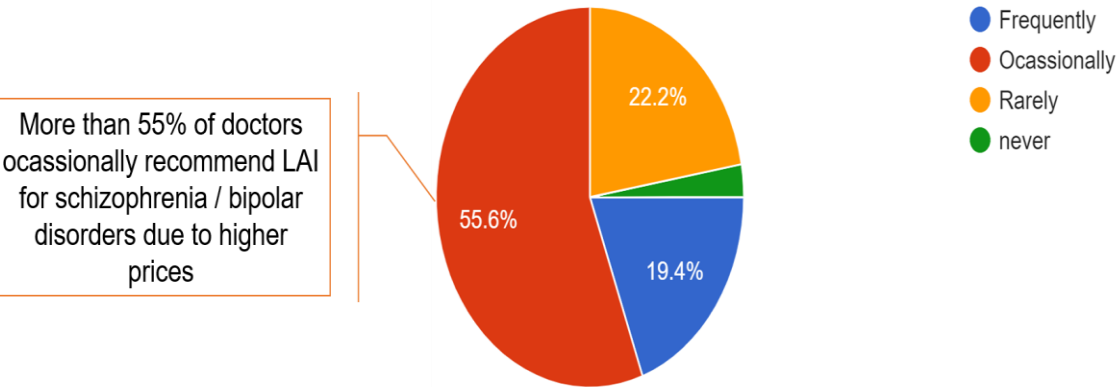
More than **94%** doctors agrees that LAI's significantly improves the treatment adherence in schizophrenia & bipolar disorders



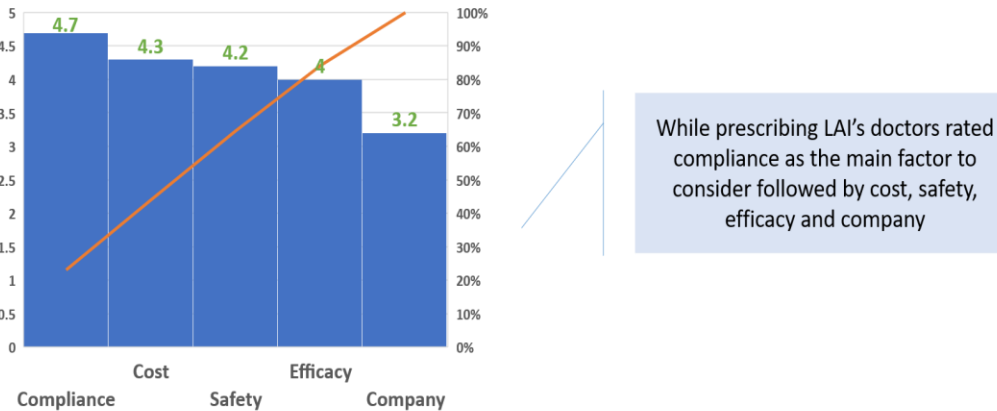
Q. Do you consider switching to LAI's for patients who are non-adherent to oral antipsychotics?



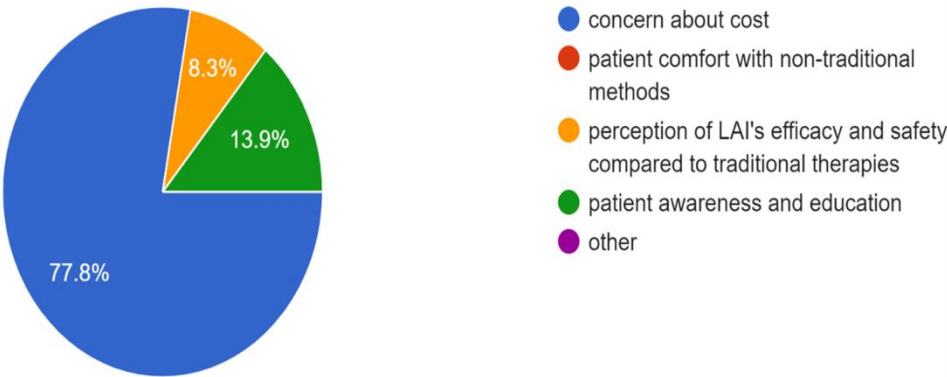
Q. How often do you recommend LAI for schizophrenia / bipolar disorders?



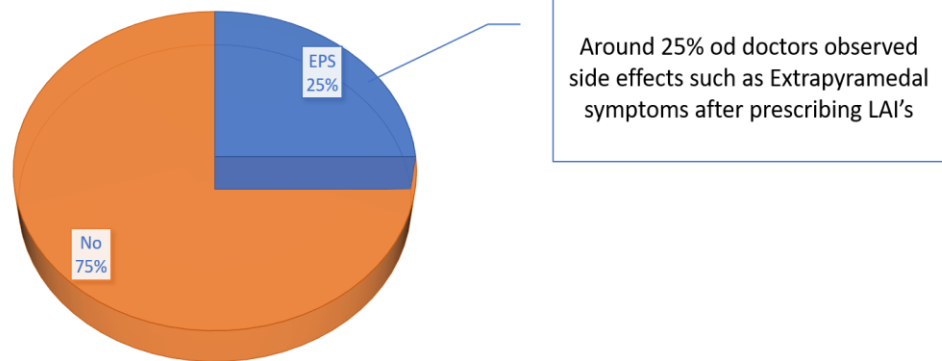
Q. On a scale of 1 to 5, rate below factors on how much they influence your decision while prescribing an LAI in schizophrenia? (efficacy, safety, compliance, cost, company)



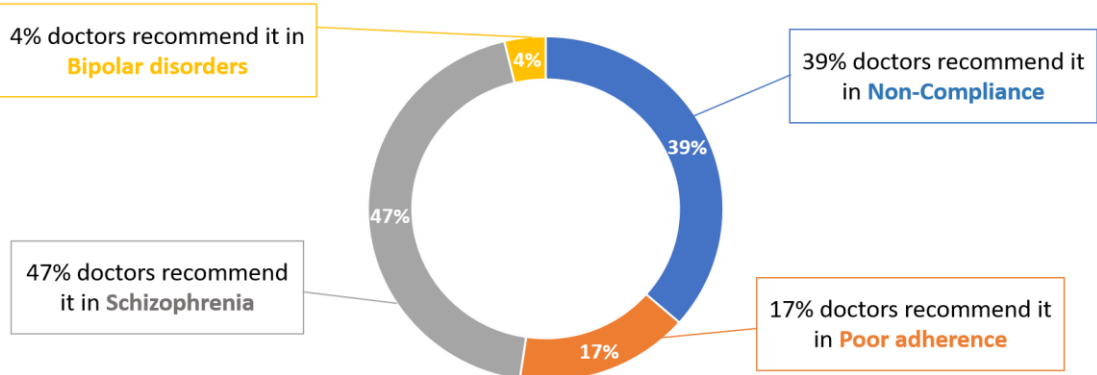
Q. Do you observe any preference among patients in their acceptance to try LAI's?



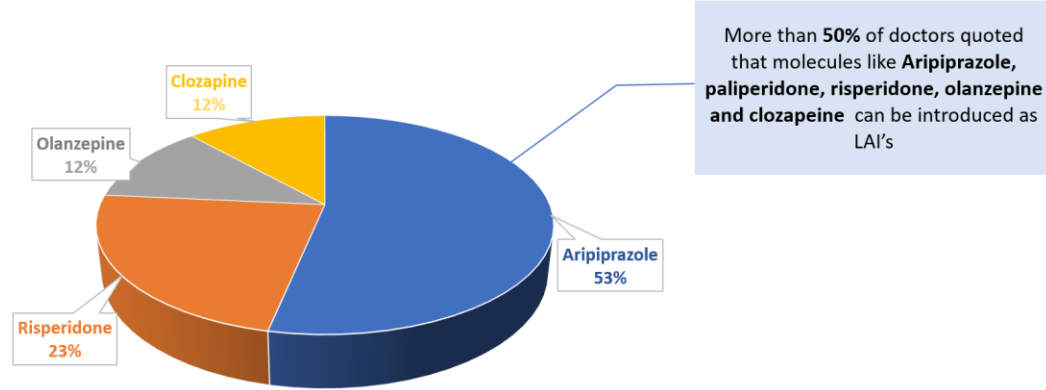
Q. Have you encountered any specific safety concerns or adverse events related to LAI's?



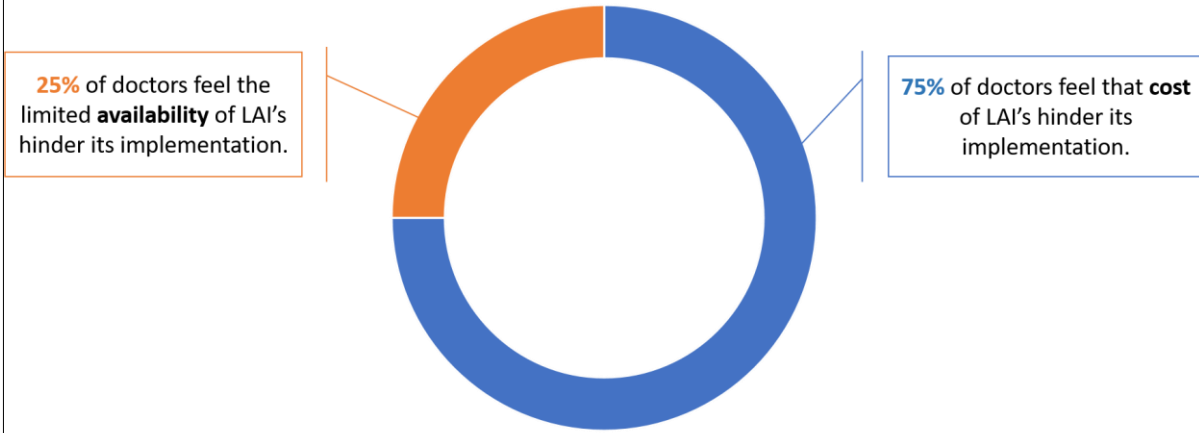
Q. Does LAI's can be recommended in your practice? if yes, in which indications?



Q. Which new molecules can be introduced as LAI's?

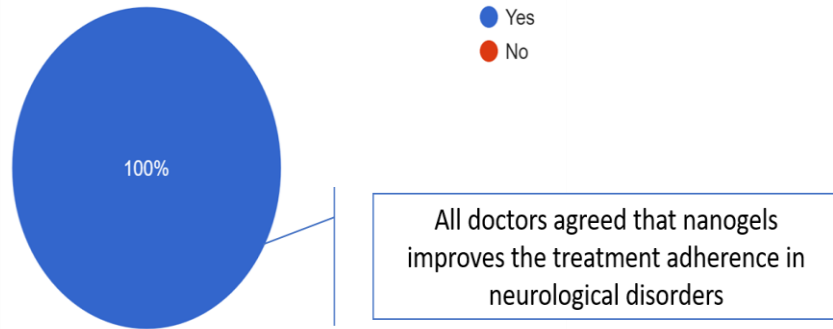


Q. Do you observe any logistical or practical obstacles that hinder the implementation of LAI's?

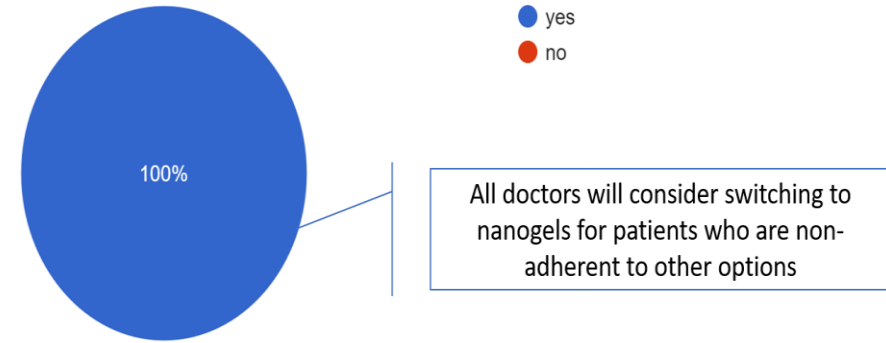


Survey Result Of Neuropathic Nanogels:

Q. Do you agree that nanogels significantly improves the treatment adherence in neurological disorders?

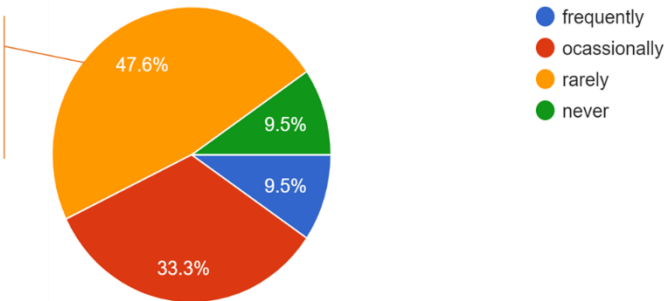


Q. Do you consider switching to nanogels for patients who are non-adherent to other options?

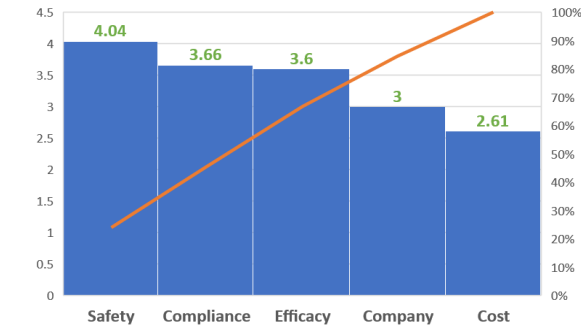


How often do you recommend nanogels for neurological disorders?

More than 47% of doctors rarely recommend nanogels due to its limited awareness.

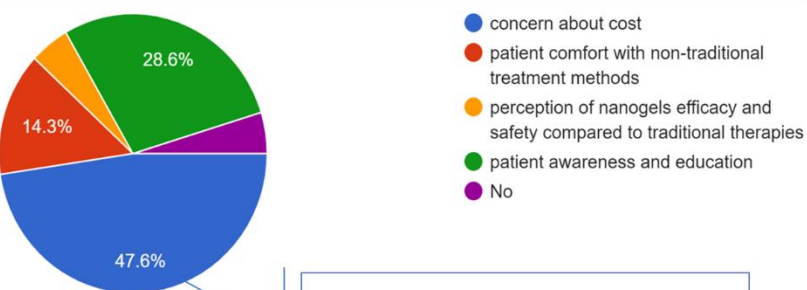


Q. On a scale of 1 to 5, rate below factors on how much they influence your decision while prescribing a nanogel? (efficacy, safety, compliance, cost, company)



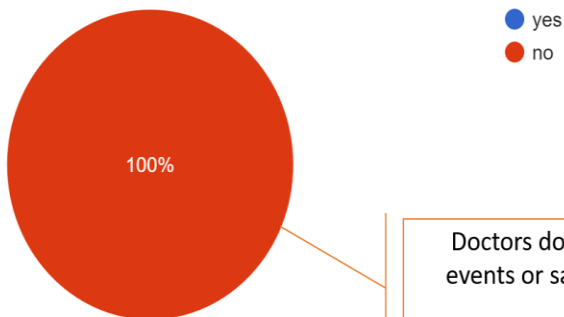
While prescribing nanogel doctors rated **safety** as the main factor to consider followed by compliance, efficacy, company and cost.

Q. Do you observe any preference among patients in their acceptance to try nanogels?



More than 47% of doctors feel that patients are more concern about its cost.

Q. Have you encountered any safety concerns or adverse events realated to nanogels?



Doctors doesn't found any adverse events or safety concerns related to nanogels.

Conclusion

- In conclusion we can say that long acting injections can be recommended into schizoaffective disorders like schizophrenia and mood disorders.
- On an average 20-30% of Patients with schizophrenia experience non-adherence to oral anti-psychotics.
- While prescribing LAI's, prescribers mostly concerns about its compliance followed by cost, safety and efficacy.
- Most of the patients are concerned about cost of LAI's, as compared to oral drugs. common side effects observed in LAI's is EPS (extrapyramidal symptoms).
- Aripiprazole, Paliperidone & Risperidone are the anti-psychotics which can be introduced into LAI's.
- And the high pricing of LAI's as compared to oral anti-psychotics is the only factor that hinders the implementation of LAI's

- While talking about neuropathic nanogels the neurologists and consultant physicians agreed that nanogels improves the treatment adherence in neurological disorders.
- Neurologists will consider switching to nanogels for patients who are non-adherent to other options.
- While prescribing nanogels doctors rated safety as the main factor to consider followed by compliance, efficacy, company and cost.
- More than 47% of neurologists feels that patients are more concern about its cost.
- Health care professionals doesn't found any adverse events or safety concerns related to nanogels.

Thank You!