A PROJECT SUBMITTED TO

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In partial fulfillment of the requirements for the degree of

Bachelor of Pharmacy

PATEL KINJAL G. (16BPH043)

Semester VIII

UNDER THE GUIDANCE OF

DR. MOHIT SHAH



INSTITUTE OF PHARMACY NIRMA UNIVERSITY SARKHEJ-GANDHINAGAR HIGHWAY AHMEDABAD-382481 GUJARAT, INDIA MAY_2020

CERTIFICATE

This is to certify that "REVIEW ON IMPACT OF DRUG INTERACTON ON DRUG OF ABUSE" is the bonafide work carried out by PATEL KINJAL (16BPH043), B.Pharm semester VIII under our guidance and supervision in the Institute of Pharmacy, Nirma University, Ahmedabad during the academic year 2019-2020. This work is up to my satisfaction.

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CERTIFICATE OF SIMILARITY OF WORK

This is to undertake that the B.Pharm. Project work entitled "REVIEW ON IMPACT OF DRUG INTERACTION ON DRUG OF ABUSE" Submitted by PATEL KINJAL (16BPH043), B.Pharm. Semester VIII is a bonafide review/research work carried out by me at the Institute of Pharmacy, Nirma University under the guidance of "Dr. Mohit Shah and Dr. Shital Panchal". I am aware about the rules and regulations of Plagiarism policy of Nirma University, Ahmedabad. According to that, the review work carried out by me is not reported anywhere as per best of my Knowledge.

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DECLARATION

I, PATEL KINJAL (16BPH043), student of VIIIth Semester of B.Pharm at Institute of Pharmacy, Nirma University, hereby declare that my project entitled "REVIEW ON IMPACT OF DRUG INTERACTION ON DRUG OF ABUSE" is a result of culmination of my sincere efforts. I declare that the submitted project is done solely by me and to the best of my knowledge, no such work is done by any other person for the award of degree or diploma or for any other means. I also declare that all the information was collected from various primary sources (journals, patents, etc.) has been duly acknowledged in this project report.

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7

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In providing the fundamental picture to my thesis I would take this opportunity to express my heartily gratitude to my guide Associate professor, Department of pharmaceutics, Institute of pharmacy, Nirma University to Dr. MOHIT SHAH and coguide Associate professor, Department of pharmacology, Institute of pharmacy, Nirma University to Dr. SHITAL PANCHAL.

Their timely guidance and support provided shape to this project because of which I am truly grateful.

Lastly I would thank Dr. MANJUNATH GHATE for providing platform to showcase my talent regarding this thesis.

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INDEX

Chapte	Title		Page
r no.			Number
1	ABSTRA	СТ	2
2	INTROD	UCTION	3
3	CENTRA	L NERVOUS SYSTEM	5
	3.1	INTRODUCTION AND FUNCTIONS OF CENTRAL NERVOUS SYSTEM	5
	3.2	DISESES OF CENTRAL NERVOUS SYSTEM	6
	3.3	DRUGS ACTING ON VARIOUS CNS DISORDER	10
	3.4	DRUGS OF ABUSE AND DRUG DEPENDENCE	20
	3.4.1	INTRODUCTION TO DRUG DEPENDENCE	20
	3.4.2	TYPES OF DEPENDENCE	22
	3.4.3	DEPENDENCE DEVELPOEMENT MECHANISM	23
	3.4.4	DRUG CAUSING DEPENDENCE	26
	3.4.5	TREATMENT OF DRUG DEPENDENCE	30
	3.4.6	SOCIAL IMPACT OF DRUG DEPENDENCE	33
	3.4.7	DEATH RATIO AND REASONS	34
	3.4.8	DRUG INTERACTION RESPONSIBLE FOR MAJOR MORTALITY IN DRUG DISEASES	35
	3.4.9	REPORTS IN DRUG INTERACTION AND DRUG OF ABUSE	64
4	CONCLU	JSION	65
5	REFERE	NCE	66

<u>1. ABSTRACT</u>

Most human action is regulated by brain directly through CNS and ANS, but the main function of CNS is to conduct various action in the body. Sometime when continuous people take drugs it is habit is called dependency. Abuse, addiction and dependency tend to be the same, but it has different interpretations, different mechanisms. Some addictive and abusing drugs have been reviewed in this study with their triggering role in diseases and consequences in human health. CNS is an essential part of human brain and due to substances such as cocaine, methamphetamine, amphetamine, diazepam, ketamine, codeine, phenobarbitone cause various complications have occurred. Receptors are essential factors that contribute to substance dependency and drug addiction processes. Many people are suffering from this drug that works directly on brain CNS and causes death numbers worldwide. Drug addiction in different regions that includes social issues related to family, community, gender, youth, jobs, crime, abuse, and cost. The ratio of death and its causes as well as the uses of drug abuse is increasing throughout the country. In contrast, therapies are limited and have many side effects on other body parts as well. Therefore, uses of drugs in the world as a whole are more than treatment because of many reasons.

2. INTRODUCTION

Substance misuse known as drug abuse, is a patterned adoption of a drug in which the substance is consumed by user in the quantity or become addict of drug, which harms themselves as well as other, and is like substance-related disorder or use of legal or illegal substances in such a way that you shouldn't. You can increase the usual dose of pills or can use prescription from someone else. You can misuse drugs to feel better, to escape from reality. Definitions of substance addiction are greatly varying in the sense of public health and criminal justice. There may be several long-term changes in the behavior of a person while the individual is under the impact of drug which leads to a criminal case. The source of this misuse is not completely understood, but explanation may be that it presents itself as a persistent crippling illness in the inherited disposition acquired from others, or a pattern that occurs as addiction arises. The largest number of deaths was from conditions linked to opioid use, then cocaine use disorder and finally amphetamine disorder. But in all of that alcohol is main for cause death. Drug addiction is also the most serious condition that happens from consuming overdose medications that disrupt or destroy the brain system and it is important to treat the entire brain function because it is not impaired. It is considered a brain disorder since drugs alter the brain- These alter the system and its working. These alteration in brain last for long duration without treatment. Addiction is recurrent, persistent, and if left untreated, or is a psychiatric disorder marked by a compulsive addiction to rewarding rewards, given adverse effects. Reinforcing like increasing a person's probability of pursuing repeated attention and being intrinsically rewarding is viewed as good or attractive. It is caused by direct adverse drug effects, related healthcare costs, longterm complications (e.g. smoking tobacco lung cancer, alcohol-drinking liver cirrhosis, or intravenous methamphetamine meth mouth), functional implications of impaired brain synaptic plasticity and the consequent loss of output. Several examples of addictions include alcoholism, opiates, sex. Some drugs are commonly used as illicit narcotics such as heroin, cocaine, bath salt, methadone, opium. Opium, hashish, and hemp as harmful or addictive substances. Cannabis use of vaporized form by smoking, drinking, and inhaling. Symptoms of addiction and addictive narcotics include feeling high or euphoria, red eyes, dry mouth, elevated blood pressure and reduced control of heart rate, anxiety, tremors, agitation, behavioral change, blurry vision. The key causes are both environmental and genetic factors; in the belief of the family of environmental

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3

factors, attitude is encouraged for drug use and genetic factors include genetic (inherited) characteristics which encouraged drug use when taken. Many types of medications such as Analgesic, Anti-pyretic, Hypnotics, Sedative, Tranquillizers, Antidepressants, Anti-Emetic are involved in substance abuse. Usage of opioid analgesics to relieve acute pain appears usually safe, although long-term opioid administration has been correlated with clinically significant levels of violence or addiction. (Koob, 1992)

<u>3. CENTRAL NERVOUS SYSTEM</u> <u>3.1 INTRODUCTION TO CNS</u>

Two main parts of CNS: spinal cord and brain. The way gray matter is structured varies in each of these regions. Sensory information is carried into the CNS by sensory ganglia and is attached to all 32 segments of main parts. Cranial nerves replace the spinal cord. Nerve fibers on all sides of the body left spinal cord. The spinal cord holds messages between brain and peripheral nerves, back and forth. Motor axons connects the CNS to all the tissues and other parts of body.

- A) Spinal cord: The spinal cord exists inside the vertebral column channel and is form by 3 meninges: Duras, Arachnoide, Pias. It approximately cylindric and start in skull and follow till medulla oblongata. 31 set of backbone axon connected through former and back root throughout. It made up of an inside layer grey mater, covered by an out whitte matter shell. whitte matters seprate in too anterior, lataral and back coulumn.
- **B**) Brain:
 - Brain stem: Brain consists of 3 region: medulla, pon, midbrain. Oblongate medulla is conoid form, inferiorly attaches pon to back bones. These includes various clusters of nerve cells, known core of nerves, and act a medium fOr ariseing and desceeding fibre. Pon are located on inside part, below middle brain and above oblongata medula. This also includes several nuclei, and nerve fibers that ascend and descend. The mid--brain iss tiny portion of brain linking fore--brain to hind brain. Cerebral aqueduct is narrow cavity of midbrain that attach 3 and 4 ventriicles. Mid brain comprises multiple nucleii and nerve fibres.
 - Cerebellum: consists of surface gray matter, and internal white matter. It connects by three peduncles to the medulla tegmentum and to pon. Cerebellu have 2 latteral hemispharee, along with vermis mid line. Cerebellum acts at an unconscious level to allow for smooth and correct execution of voluntary motor functions. Four deep cerebellar nuclei find themselves inn whitee mater of cerebelum: fastigius, dentatus, emboliformus, and globosus.
 - Diencephalon: These regions, visible in groos brains after sagital segment divides cerabral hemisphere, lie at top brainstem.

Diencephalon consists of: thalamus, hypothalamus, epithalamus, and subthalamus. This region's functions iss combine sensori and motoor content, and start interpreting this record acording as expectations of brain's sensitive areas.

- 4) Cerebram: Cerabral Hemisphere: the cerebrum, which forms the majority of the brains and nervous system, form of sinistran also dexter hemispheress consiting grey mater, whitee and basal. The cerebral cortex contains the regions of motor, sensory, auditory, and visual.
- 5) Basal Nuclei: can be laterally defined in a coronary segment via the midpoint of the cerebral hemispheres. The corpus striatum, claustrum, and amygdala are three major nuclear classes deep inside the hemispheres.(Seshayyan, 2016)

FUNCTIONS OF CENTRAL NEVOUS SYSTEM

Responsible for feeling, reaction and integration. Main functions of nervous systems – sensation it means collect external information by receiving all stimuli give response. Other work of this maintain body, particularly environmental activity. Obtain data from surrounding receptors move signal to system and produce response. In humans this system able to control language, conversion and other feature that not similar to different species.

System transfer massage one cell to other at many level. Through many ways cells give information to each other which known as hormones, so these transmit to such distance. Signal from neurological has lesser effect than hormone, very speedy and notion travel around 100 meters per second.(Learning & Lear, n.d.)

3.2 DISEASES OF CNS

- ADDICTION': it's stage of brain condition when levels of drugs will increases by various mechanism. When long time take medicines also humans became habited.
- 2) 'ARACHNOID CYSTS': Above mind arachnoid cysts are protected by liquid

 cerebrospinals. Very inverate conditions and give lesser side effects.
 Symptoms like pain in cerebreal, stroke are common overall and microseism

shown in children preseniles demantia, hydrocephaalus and urinare incontinence for older.

- ATTENTION DEFICIT/ HYPER ACTIVITY DISORDER': Natural condition of brain disorder. At age of adults symptoms are started to show. Also higher possibility to develop dementia by lewey bodis, also some serious matters observe in this conditions.
- AUTISM': inter communication with people and their effects main reason to develop disorder, continuous mood change. Indications usually seen improvely, but few childs with this saw decrease in activities and also reduce social interaction.
- 5) 'BIPOLAR DISORDER': it's original trouble which correlate with brains default 2 signs – first sadnesss and second insanity. Higher psychosis to reduction mania are commonly take place around in month. These associated with "Parkinson's disease" which will be proved by newly searchers.
- 6) 'CATALEPSY': Serious distress mood, caused by lower confidance and by lost intrest in hobby, all unpreventable as well as regular.(Tsukagoshi, 1966)
- 7) 'ENCEPHALITIS': simpally injury can occur in mind. When unknown matters or virus attack on brain it seen. General signs – headachee, irritation in neck, depression, shivering, etc. Wast nyle damage happen, it dangerous to population mainly for dead humanbeings.
- 8) 'EPILEPSY/SEIZURE': Deadly disability of brain's main system like irregular, actual. After breaking exciting activity affect to cerebram. Condition may be uncommon, without any reasons, coincident change of mental. About fifty million population have this and eighty percentage grow to establish state. Newly reports show that greately affect to children and older people. During treatment it will be generate as outcome.
- 9) 'LOCK IN SYNDROME': situation co-related with brain's blockade of some part of stem, so bodies and many face tissues immobilized, become helpfulness. Size of eye alter for defend and change shape.
- 'MENINGITIS': difficult manages main elements of brayn. Bacteraiils or viuses corruption reasons for this. Adverse things like higher temperature, emitting, neck become hard happened.

- 11) 'MIGRANE': seriousfull, common, debilitate to public through constant mild discomfort in tisse. Mostly related to 'ANS'.
- 12) 'MULTIPLE SCLEROSIS': nonstop, damage disorders, spath mylin of neurans hurt. Problems with vision or sensation, shorting of musclas, absences of speech.
- 'MYELOPATHY': environmental issues 0f squeezing which came from agony, internal cramp, deleterious moves. At full length spinal cod meet inner to spyne.
- 14) 'ALZHEIMER'S': neuronal problem associated with stem commonly seen above 65age. 60 percentage nation have this and leads to dementia. Special problem is not known.
- 15) 'HUNTINGTON'S DISEASES': Declamatory derangement of cells that obtained. Units started to impair throughout head, particularly stratum. Uncommon progress reduction observed in stages. Significant influenaces ten of each 10,000 numbers westward europeaan site.
- 16) 'PARKINSON'S': dopamine movements- main source f0r appliance artistry and language. Indication include bradykynesia, muscles unbanding habbits, vibrations. Different many conditions similar to each others. All have lower levels of dopamine receptotts.
- 17) 'TOUREYYE'S': Seized syndrome, at age around childhood it will began and identify through activities and speech tricks. Blurring main key factor for thus.
- 'INTRACEREBRAL HEMORRHAGE': Sometimes bleeding can occur in cerebrum part due to many reasons also blood clot observed, grow hermits. In strokes 15 percentages inner cranials hemorrhages construct, cause hypertension.
- 19) 'ISCHEMIC DISEASE': Arteries to minds full of substances strokes take place. From heart and lungs depends on artery which helps for blood. In that 'oxygen' and 'supplements' reach to main cycle, process to remove CO2 and wastes. By this need to urgent therapy.
- 20) 'HEMORRHAGE': Blood spread surrounded to brain's cavity. One type of strokes. High tension, drugs more uses, trumass important effects. Individuals having many factor which relates to this.
- 21) 'HEADACHE': mentally unstable, increase in accent, consciousness, etc are reasons. With migrane people thought to avoid their all woks.

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22) 'MOVEMENT DISORDER': It's self generate conditions, gathering disoredrrs 'dyskinesias'. Chorea means one side body. (Bruzzone et al., 2009)

3.3 DRUGS ACTING ON VARIOUS CNS DISORDER

General anesthetic agents	IV agents	Ultrashort acting Barbiturates	Thiopental sodium,
			Methohexitol
		Miscellaneous	Hydroxyclone, althesin,
			ketamine,etomidate,
			Propanedid, midazolam,
			Propofol
		Non Barbiturates	Dexmedetomidine
	Inhalation	liquid	Diethylether, chloroform,
			Halothane,enflurane,desflurane,is
			oflurane, methoxy flurane, ethylchl
			oride
		Gas	Cyclopropane,ethylene,
			Nitrousoxide
	Benzodiazapines		Midazolam, diazepam, lorazepam
	Opoid		Fentanyl,remifentanil,sulfentanil

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	dissociative		Ketamine
analgesic	Opoid analgesic	Natural	Morphine, codeine,
			Thebaine
		Semi synthetic	Heroin, dihydromorphine,
			Dihydrocodeine,butorphenol,levo rphanol
		Synthetic	Pethidine,fentanyl,meperidine,me
			thadone,pentazocine,cyclazocine
	Non opoid analgesic	Salicylates	Methyl salicylic acid,
			Sodium salicylic acid,
			Acetyl salicylic acid,
			Diflunisal
		Para-aminophenol derivative	Phenacetin, paracetamol
		Pyrazolon derivative	Phenylbutazone,oxyphenbutazone
			,azapropazone,
			Analgin,antipytine
		Propionic acid	Ibuprofen,fenoprofen,indobufen,k

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			etoprofen,naproxen,tiaprofenic
		Cyclic/indole acetic acid	Indomethacin tolmetin
			Sulindac
		Phenyl acetic acid derivative	Diclofenac,alclofenav,
			Fenclofenac
		Oxicams	Piroxicam
		Fenamates	Mefenamic acid,
			enfenamic acid
		benzoisoquinoline	Papaverine, noscapine
		Other	Flosulide, celecixib
Local anesthetic	Based on source and nature	Synthetic nitrogenous	Procaine
		Synthetic non nitrogenous	Benzyl alcohol,
			propanediol
		miscellneous	Clove oil, chlorpromazine,
			Phenol
		Natural	Cocaine

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	According to site	Surface	Cocaine, benzocaine
		Block	Procaine
		infiltration	Procaine, lignocaine,
			cinchocaine, amethocaine
		Spinal	Amethocaine
	Based on effects and times	Lower effect and short time of	Procainee,
	of action	activity	chloroprocaine
		Medium efficacy and intermediate	Lignocaine,prilocaine
		period of process	
		High efficiency and long extent of	Ropivocaine, chinchocaine
		action	
Anxiolytics and hypnotics drugs	barbiturates	Long acting barbiturates	Phenobarbitone, mephobarbitone,
			methobarbitone
		Short acting barbiturates	Hexobarbitone, secobarbitone
		Intermediate acting barbiturates	Amobarbitone, but abarbitone, pent
			obarbitone
		Ultrashort acting barbiturates	Thiopental, methihexitol,

			Thiamylal
	Non barbiturates	Benzodiazapam	Diazepam,chlordiazepoxide,oxaz
			epam
		Triazolo benzodiazapam	Alprazolam,triazolam
	bromides		Bromides of sodium,
			Bromides of potassium,
			Bromides of ammonia
	aldehyde		Paraldehyde,chlorahydate,
			Chlorbutol
	urieides		Glutethimide, methyoprylone, obli
			van
	alcohol		Ethanol
	miscelleneous		Buspirone,chloral
			hydrate,mrprobamate,
			zaleplon,zolpidem
Anti epileptic drugs(anti	Inhibiting sodium		Phenytoin, fosphenytoin, ethotoin,

convulsant)			mephenytoin,topiramte,carbamaz
			epine
	Inhibiting		flunarizine,ethosuccimide,phensu
	calcium		ccimide
	GABA	barbiturates	phenobarbitone,primidone
			sodium valproate,
			vigabetrine,progabaline,
			gabapentene
	benzodiazapine		clonazepam,diazepam,oxazepam,
			midazolam
	NMDA receptor antagonists		phencyclidine
anti psychotic drugs/neuroleptics		phenothaizine derivative	chlorpromazine,thioridazine,triflu
			operazine,promazine
		thixanthrene derivative	Thiothixene
		butyrophenone	haloperidol,trifluperidol,penflurid
			ol
		miscellaneous	pimozide,clozapine,risperidone

		mood stabilizers	carbamazepine,valproic acid
Anti depressants	Inhibitors of monoamine	Selective 5-HT inhibitors	Fluoxetine,fluvoxamine,paroxetin
			e,citalopram,dapoxetine
		Classic TCA	Imipramine, desipramine, amitripty
			line,clomipramine,doxepin
		Mixed 5-HT and NA	Venlafaxine,desvenlafaxine,dulox
			etine
		NA	Bupropion, reboxetine, atomoxetin
			e,maprotiline
		Herbal preparation St John's wort	Hyperforin
	'Monoamine receptor		Mirta-zapine,trazo-done,
	compititor'		
	Monoamine oxidase	irreversible	Tranyl-cypromine, isocarboxazid
	inhibitors	reversible	Moclo-bemide, clorgyline
	Melatonin agonists		agomelatine
CNS stimulants and psychomimetic	Psychomotor stimulants	amphetamine	Detroamphetamine, methampheta
drugs			mine

1	I	· · · · · · · · · · · · · · · · · · ·
	methylphenidate	Ritalin,MDMA(3,4-
		methylenedioxymethamphetamin
		e)
	methylxanthines	Caffeine,theophylline
	cathinones	Cathinone,cathine
	benzylpiperazine	Arecoline
		Modafinil
		Cocaine
		Mephefrone
		Methylone
Psychomimetic drugs		LSD(lysergic acid diethylamide)
		Psilocybin
		Mescaline
		MDMA(3,4-
		methylenedioxymethamphetamin
		e)
		Ketamine

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			Phencyclidine
		Others	DMT(dimethyltryptamine)
			DPT(dipropyltryptamine)
			DOM(2,5-dimethoxy 4
			methylamphetamine)
analeptics		Xanthine alkaloid	Caffeine, the ophylline, the obromin
			e,aminophylline
		sympathimimetic	Amphetamine, Ritalin,
			methylamphetamine
			Picrotoxin,leptazole,camphor,lob
			eline,aminophenol,ethamivan
			Strychnine, picrotoxin,
			pentylene tetrazole,
			doxapram
migrane	In acute attack	Analgesic	Aspirin,diclofenac,
			Paracetamol, naproxen,
			Ibuprofen, indomethacin

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		Anti emetic	Metoclopramide, anti histamines like niramine,promethazine
		Specific 5HT1D receptor	Sumatriptan,zolmitriptan
	Prophylactic drugs	Calcium blockers	Verapamil, furanizine
		Beta adrenoreceptoor antagonists	Propranolol, metopralol
		TCA anti depressants	Amitriptyline,nortryptyline
		Non specific 5-HT receptor antagonists	Methysergide, cyproheptadine
		Others	Pizotifen, clonidine
Anti parkinson			Amantadine, benztropine, biperide
			n,carbidopa,entacapone,levodopa,
			trientine,talcopone,pramipexole

3.4 DRUGS OF ABUSE AND DRUG DEPENDENCE

3.4.1 INTRODUCTION TO DRUG DEPENENCE

Dependency medications are prescription medicines with an agreed medical application but also a greater risk for misuse, abuse and dependence. Relevant side effect occur by repeated administration of medications. When any matters use two word-habited and addicted simply described. Dependency occurs when one or more medications are required to work. The American Association of Psychiatrists (APA) used to differentiate between dependence and violence. Abuse was seen as the moderate or early phase of excessive drug use leading to dependency. People found dependence more severe than rape. Dependency may be a reaction to a material on a body. This also occurs when you are dependent on medicine to manage a chronic medical condition.

'Addiction' which is one type of conditions relates to minds, drugs damage to people and also their family. At beginning patient took medicines itself, then become habited.

Such conditions consist of :

- Increase pressure
- Diabetes mellitus
- Glaucoma

Habitation may cover:

- Signs of almost drug habit.
- Produce higher ability of substance when take medicines, more dugs will essential.
- Other activities should escape during course of medication.

"The National Drug Abuse Institute" reports that 22.7 million Americans seek assistance with addressing a substance or alcohol problem. People may in some cases take a prescription medication for pain or another medical condition. Often this form of use may evolve into a drug use disorder.

Identified causes for substance use disorders include:

• Having a family history of abuse

- Living in an area where illicit substances include commonly used and readily available
- Past of anxiety
- Depression old days
- Other mental health problems.

Users of the drug usually go through several periods of opioid dependency. One way these stages are defined by health care professionals is with the Jellinek Curve. The curve tracks traditional stages encountered through the use, dependency, illness and recovery of occasional times. (Ghosh, 2020)

These phases cover:

- 1. You use recreational drugs. You seldom take them, in social environments.
- 2. You continue to frequently use drugs, often leaving family and friends in favor of substance use. You're getting nervous about losing access to drugs.
- 3. When you become more aware of their consequences and obsessed with getting them, you become addicted to drugs. Much or all of your previous interests and relationships can be abandoned.
- 4. You are drug addicted and unable to survive without the drugs. Your emotional and physical health is getting worse.

Recognizing the signs of drug dependency: By looking at behavior, you will also assess if an addiction has turned into dependency. This can cause a physical reaction when a person addicted to drugs hasn't had them for a period of time. Physical withdrawal signs arise when the body is stressed out of the drug. Those signs are:

- Fear
- Depression
- muscle fatigue
- hallucinations
- body aches
- nausea
- sweating
- vomiting

Schedule 8 drugs are subject to a higher level of regulation than any other prescription-only drugs for prescribing, processing and dispensing. (Seshayyan, 2016)KINJAL PATELINSTITUTE OF PHARMACY, NIRMA UNIVERSITY21

Many of the most widely prescribed Schedule 8 medications contain opioids such as

- > Morphine
- Oxycodone
- ➢ Fentanyl
- ➢ Buprenorphine
- > Methadone
- Pethidine

Stimulant such as:

- > Dexamfetamine
- Lisdexamfetamine
- Methylphenidate. (Weiss, 2011)

3.4.2 TYPES OF DEPENDENCE

The following phenomenon characterizes Dependency:

- 1. The psychological or emotional dependency
- 2. Physical addictions
- 3. Tolerance
- 'Emotional dependence': Once the drug is stopped this is the first to arise. The person becomes distressed, or may be in distress. Emotional dependence exists on any medication that changes consciousness but bizarre e.g. muscarine. E.g., non-narcotic analgesics, diuretics or purgatives do not extend to others in ordinary doses. Dependency often relies on the views of the patient about the drug. For starters, the dread of obesity obsesses those who rely on purgative and diuretics. Show when administer drugs by tablets or injections.
- 2) 'Physical dependence': withdrawal signs means stop medicines, that disturbances. Many biological differences happen due to contionous dose. After stopping matters some mentally and body changes may take place for unknown time. Also patients wish to take narcotics but not well. It leads to mind set that drug withdraw become fear for people. 'anti-depreassants' has higher affinity to dependence than 'stimulants'. It is said that "an index of addictive proneness could be the first exposure to any drug.

3) 'Tolerance': Process in that use many drugs for maintain feelings. 'Morphine' and 'heroin' main 2 drugs for dependence. Frequently developed type, leads to relaxation and convulsion. Many other medicine not always leads to habbit. Drug regularly taken for long time reaction happen. E.x. 'opioids'- receptors responsible to adaption off medicines. Subject appear uncontrollable mood swings. After taking stimulants patienst feels good, relax, calm, enjoy life. Stopping leads to 'depression', 'trauma'.

3.4.3 DEPENDENCE DEVELPOMENT MECHANISM

In organize manner, constant cycles of ill that see in brains, regulate through genes, components of environment. Dopaminergic system easily modulate by addicted-drugs, build up pharmaco and normal advantages. Bymany neurons pf dopaminergic 'mesolimbic route' form. 'Opioids', 'alcohol', 'nicotine', 'cannabinoids', and 'psychostimulants' all help for improve level of 'dopamine'. Different medicines have various receptors, but at last hve same effect on dopamines. Two main work: realization, trans-duction. 2 sites of each receptor- 'ligand-binding domain','effector domain'. First has hydrophillic and lipohillic properties, hetro-polymeric.(Koob et al., 2004)

'Different effector mechanisms of receptors about four types in general':

- 1. G-cojoin protein receptors
- 2. Inner ion channel receptors
- 3. Enzyme receptors
- 4. Receptors which regulate the gene expression

Drugs	Receptor
'Opiates'	Agonists at mu, delta and kappa receptors (peptides).
'Cocaine'	Indirect agonist of dopamine by inhibiting its transpoter
'Nicotine'	Nicotinic acetylcholine (Ach) receptors
'Ethanol'	Gamma aminobutyric acid (GABA) agonist and Nmethyl-D-
	aspartic acid (NMDA) receptor antagonist
'Amphetamin'	Indirect agonist of dopamine by stimulating its relese.
'Cannabinoids'	CB1 and CB2 receptors

"OPIOID DEPENDENCE": Several methods for understanding opioid dependence have been suggested.

- A) 'CAMP hypothesis': 0pioid site acts on cAMP, can lesser levels. Fewer medical-use of 'morphinnes' related to neuronal-blastomas tissuess, affect adenosine thus reduce cyclases enzymes, then equal levels can observed because opietas tolerability, dependancies. Called "hypothesis of CAMP". If it remove than activation of receptor blockade, key rupture. 'G protein receptors' found tolerability to stay opposite 0f kappa agonists.
- B) 'Other neurotransmitter systems': Endothalin A- work to resist from Morphine.Opioid conscious action regulate over 'GAT-1' when put in varaitaion.

"ALCOHOL DEPENDENCE"

- A) 'GABAergic system': in microsasc, chlorine uptake maintain by 'GABA' with liquor effcts, liquid more chlorines also increases. Little more amount will able to reduction A-GABA with anxiety. Besides this proteins levels, alfa units becamoes lower.
- B) 'Serotonergic system': with more alcohol consumes 'cerebrospinal fluid5hydroxyindoleacetic acid' maintain as lower, onset activity, low levels of cerebrospinal fluid5-hydroxyindoleacetic acid have been associated with alcoholism, in particular with rapid onset, severe implicit.
- C) 'Dopaminergic system': Dopaminas, metablitis, action of dopaminergic seem t0 reduce because misuse alkohols. Dependency-liquor caused DA lower, more D2 structures.
- D) 'Endo-cannabinoid system': reduction in mechanism of transduction, maintaince in CB1 but production of 'cannabinoids-arachidonylethanolamide and 2-arachidonylglycerol' will sufficiently in severe stage alkoholism.
 'Proteomics and alcoholism': In more methanol users 'Peroxiredoxin', 'creatine' 'kinase', 'protein' easily balance. Whole procedure conduct neurondegradations, bat relate to better in 'Alzheimer's' performance.

"NICOTINE DEPENDENCE"

A) 'Cholinergic system': use of agonist or antagonist receptors cholinergic work,
 e.x. 'alpha', 'beta'& give results. Response rely on sub-units structures, so

when Dopamin lesser similar chlorine reduce. Activity lower than cocaine, depend on own.

B) 'Opioidergic system': In DNA concentrate take space at 'hippocampus', 'striatum' when stop 'nicotine' dose in therapies.

"CANNABIS DEPENDENCE"

A) 'Cannabis works on the cannabinoid receptors': CB-1,CB-2 main types.
 Activte protein kinase, modulate K+, cyclese adenylate are regulated.(Bloom & Koob, 1988)

3.4.4 DRUGS CAUSING DEPENDENCE

DRUGS	DESCRIPTION
COCAINE	From plant of coca it will produce. Give higher energy to humans. People ease speak, move, or think. Then mood may be change. Also some works can do without their interest. 'Cocaine hydrochloride' topical solution is use for long time cause leads to habited.(Tobergte & Curtis, 2013)
HEROIN	The prescription medication made from morphine, a natural product that is derived from various opium poppy plants' seed pods. Heroin is a highly addictive drug and its use has far-reaching effects beyond the individual consumer.(Finlayson, 1995)
INHALANTS	Inhalants are volatile substances that create chemical vapors that can be inhaled to cause a psychoactive effect, or effect that changes the mind. While other abused substances can be inhaled, the word "inhalants" is used to describe a range of substances whose most common feature is that they are seldom, if ever, taken by any other route than inhalation. (Of et al., 2009)
MARIJUANA	Marijuana — also known as marijuana, cannabis, hemp, grass, bud, ganja, Mary Jane, and a whole host of other slang words. In hand-rolled cigarettes or cigars, in pipes, water pipes or in blunts, some people smoke marijuana. The primary psychoactive drug is delta-9-tetrahydrocannabinol (THC).(Seely et al., 2011)
FENTANYL	Fentanyl is a strong analgesic synthetic opioid, equivalent to morphine but 50 to 100 times more potent. This is usually used to treat extreme pain victims or to relieve pain following surgery. It's also often used to treat chronic pain patients
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	who are medically resistant of other opioids.
CODEINE	Codeine is a prescription reliever used for the treatment of mild to moderate prescription. It comes in tablet form and in prescription-grade cough suppressants as the main ingredient. The codeine is chemically very similar to drugs like morphine and hydrocodone. (Tackett-Gibson, 2011)
MORPHINE	Morphine is an opioid found in the opium poppy plant naturally. All should be work with brain, spines and give relief in pain.
KETAMINE	Ketamine is a hallucinogenic drug often referred to as a dissociative anesthetic, or party drug. A dissociative drug used in veterinary medicine as an anesthetic. Hallucinogens are dissociative substances that cause the patient to feel disconnected from reality.
3,4 METHYLENE DIOXYMETHAM OHETAMINE	MDMA is a synthetic drug that performs as a hallucinogen and a stimulant. It creates an energizing effect, time and perception disturbances and increased pleasure from sensory experiences. Increased respiration, heart rate, blood pressure, temperature; heart beat irregular. Methamphetamine induces increased movement and talkativity, reduced appetite, and a pleasurable feeling of well-being or euphoria, like amphetamine.(<i>MDMA (Ecstasy) Abuse Introduction</i> , 2020)
DEXTROMETHO RPHAN	It is a cough suppressant used in many cold OTC pharmaceutical products. DXM is an opioid without pain relief effects, and does not affect opioid receptors. DXM produces a depressive effect, and often a hallucinogenic impact, similar to PCP and ketamine when administered in large doses.
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LOPERAMIDE	This is an opioid not meant to get into the brain. However, when taken in large quantities and combined with other
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	substances, the drug can behave in a similar manner to other opioids. (Finlayson, 1995)
D-LYSERGIC	For mood change, developed feelings used. Clean, off white, without odour, easily melt in water, produce from fangus.
ACID	(Volkow, 2020)
DIETHYLAMIDE	
PHENCYCLIDINE	Phencyclidine's generic name, is a hallucinogenic drug that stimulates the brain in different ways. Phencyclidine is
	addictive, because it affects the chemical structure of the brain.(Tackett-Gibson, 2011)
ANABOLIC	The most frequently misused APEDs are anabolic hormones, hormones or androgens. These are similar synthetic
ANDROGENIC	substances to testosterone in the male sex hormone. We encourage the growth of muscle cells in both males and
STROIDS	females, and the development of human sexual characteristics.(NIDA, 2018)
SYNTHETIC	Synthetic cannabinoids are mammal-made mind-altering compounds that are either sprayed on dried, shredded organic
CANNABINOIDS	matter so they can be smoked or sold in e-cigarettes and other products as liquids to be vaporized and inhaled. Such
	chemicals are called cannabinoid compounds, because they are similar to marijuana plant chemicals. (Seely et al., 2011)
TOBACCO	Tobacco contains nicotine, an element which can contribute to dependency. Tobacco items to be smoked include
	cigarettes, cigars, bidis and kreteks. (Tobacco, Nicotine, and E-Cigarettes Introduction, 2020)
BENZODIAZEPIN	Often it is used for treating anxiety, acute stress reactions and panic attacks, such as diazepam clonazepam and
ES	alprazolam. Benzodiazepines are typically not recommended for long-term use due to the high risk to establish
	tolerance, dependency or addiction.(Ashton, 2003)

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NON-	Like 'zolpidem', 'eszopiclone', 'zaleplon' classified as z-drugs, have a complex chemical form which function as
BENZODIAZEPIN	'benzodiazepines' on the same 'GABA' type A receptors in the brain. They are believed to have less side effects than
ES SLEEP	benzodiazepines, and less chance of dependency.
MEDICATIONS	
BARBITURATES	Such as 'mephobarbital', 'phenobarbital', 'pentobarbital sodium' are used least frequently to reduce stress or to assist
	with sleep disorders due to their higher risk of overdose relative to benzodiazepines. They are also still used in surgical
	procedures and in the treatment of neurological conditions.(Janecek, 1981)

3.4.5 TREATMENT OF DRUG DEPENDENCE

1. Detoxification: The first step of therapy is usually detoxification. It means removing a substance from the body and restricting responses to discontinue. Rehab service will use opioids in 80 per cent of cases to alleviate withdrawal symptoms. If a person is addicted to more than one drug, they may also need medications for each to reduce the anxiety symptoms.

2. Counseling and behavioral medications: It is the most common type of post detoxification therapy. Treatment can occur on a person, group, or family basis, depending on the individual person needs. During the beginning of treatment it is usually prolonged with the number of sessions rapidly declining over time as signs improve.

There are various types of therapy which include:

1 Cognitive-behavioral treatment that helps people understand and alter ways of thinking that have drug use connections.

2 Multidimensional counseling intended to help increase the functioning of the family of youths or teenagers with a drug problem.

3 Motivational coaching to improve the ability of people to adapt and make behavioral changes.

4 Motivational rewards which promote abstinence by reinforcing positively

Addiction therapy seeks to help individuals alter habits and attitudes about using a drug, as well as strengthen coping skills and encourage other therapies.(Coller & Hutchinson, 2012)

A Rehabilitation services: Long-term treatment plans for substance-related and addiction conditions may be highly successful, and usually concentrate on staying drug-free and improving function of social, personal, and family obligations.

Few types of facilities can include a supportive atmosphere, including: short-term residential treatment: It focuses on detoxification and educating an patient in a supportive group by intense therapy for a longer duration of time.

Therapeutic organizations: A person requiring long-term care for serious types of addiction illness will stay in an accommodation with on-site workers and those in rehabilitation for between 6 and 12 months. The environment and staff function as important influences in the treatment from substance use and improvements in behaviors and behaviours.

30

Recovery accommodation: It includes a controlled, short-term stay in accommodation to help individuals take on commitments and transition to a healthy, independent life without continuing use of drugs. Rehabilitation housing provides guidance on how to manage finances and find jobs, as well as ensuring a person's link during the final stages of rehabilitation and community engagement.

1.Self-help organisations: This will help the recovering adult encounter people with the same addiction illness that also improves confidence and diminishes loneliness feelings. They may also act as a valuable source of knowledge, education, public and.

2.Medications: After recovery from a substance-related disease and its associated complications, a person can take treatment on a continuous basis.

However, people more often use drugs to treat withdrawal symptoms through detoxification. The therapy varies according to the content to which the person is addicted. Longer drug use helps minimize cravings and avoid relapse, or a return to the dependency following recovery from addiction. Medication is not a stand-alone drug medication, and should be followed by other forms of intervention such as psychotherapy. Special treatment is required for addiction to the following substances.

Alcohol

People with alcohol use disorder can take the following drugs to decrease cravings and symptoms of withdrawal including:

A. Naltrexone: It blocks the activity of opioid triggers in the brain that create stimulating and euphoric effects when a human consumes alcohol and decreases the chance of relapse. While not successful in treatment for all people, in some cases it has a significant impact on abstinence.B. Acamprosate, or Campral: This can minimize symptoms of long-term withdrawal, including sleeplessness, depression and a general sense of unhappiness known as dysphoria. It has a more positive effect in individuals suffering from serious alcohol and addiction disorders.

C. Disulfiram and Antabuse: This is a medication that interferes with alcohol breakdown, leading to side effects including skin redness, feeling sick, and an

anxiety attack should the person attempt to drink alcohol in recovery. It acts as a dissuasive to people with high levels of motivation towards recovery.

Other medications can be recommended by physicians and recovery practitioners to treat certain potential mental health problems, including depression and anxiety, which can be a cause or effect of drug abuse disorders.

Patients in recovery facilities may also undergo infectious disease tests that may have been the product of some high-risk conditions associated with their addiction disorders such as Aids, hepatitis, and tuberculosis.

Competitive Inhibitors: one that binds to the same target site and can be replaced by that agonist doses to some degree. The agonist distributed as part of the treatment is equivalent to the drug being exploited in terms of receptor specificity and effectiveness in activating the receptors upon binding. Agonist and antagonist to be present at a sufficiently high concentration to control almost all receptors, either with the agonist or the antagonist. It would be important to choose the ratio so that the net activity of the receptors involved would be within acceptable range. That will result in an attenuation of the injection and the dose response curve for the medication being abused will change to the right. A change in the dose-response curve would be more drastic than the one induced by the administration of the same doses of agonist alone or antagonist alone, leaving more receptors open for activation by the abuse drug.

Noncompetitive Inhibitors: Using a noncompetitive antagonist will offer additional advantages over competitive blockers. That is because a non-competitive antagonist cannot be surmounted by increasing the dosage of the drug being abused. Nonetheless the agonist-antagonist mixture can provide a stable level of net activation, Since the agonist may counteract antagonist's actions by acting at specific receptor sites. The abused medication will have little or no effect once the body is saturated with agonist and antagonist co-administered as part of the diagnosis, with few uninhabited receptor sites available. Agonist and antagonist together remove the opportunity open for an reaction to the drug being abused.

Functional Inhibitors: When two mechanisms mediated by separate receptor sites are antagonistic, a balanced condition of activation can be given while intermodulation the effects of a drug being exploited at one of the sites. These may involve the balance of the limbic system between sympathetic and parasympathetic branches. A compromise between muscadnic cholinergic and dopamine D~ activation of the receptor in the CNS. Essentially, the dose-response curve would be in an asymptotic area for an

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agonist operating at one of the systems and would not be receptive to the abused drug. The efficacy of this method would rely on the functional antagonism between the two structures at all applicable locations. Using the active and highly selective antagonists mentioned in the previous section will be more likely to maintain a healthy state of regulation at a given receptor subtype, and is expected to be more successful in blocking an addictive drug's reinforcing actions with minimal side effect.(Rose & Levin, 1992)

3.4.6 SOCIAL IMPACT OF DRUG DEPENDENCE:

'Heroin,' 'cocaine', 'morphine', 'prescription formulations' widely abused drugs. Alcohol and tobacco misuse is also seen in these countries, in tandem with other drugs. Because of addiction, harm to health of patient but also impact social issue. Abuse of alcohol and narcotics in a family causes stress, which drains national resources. Drug addiction in various sites, produces familiar problems, with nation, sex, job, value. Thee dispute hes consequences for the implementation of approaches for care and prevention. Family response to opioid abuse involves denial, guilt, suppressed frustration, sadness, bargaining, anxiety, personality change and co-dependence. Friends and family react differently. A substantial majority of family members felt bad in a study carried out in India; about 2/5 expressed thair frustration, acromony; almost 1/5 urged the addicted too matters; The spousal indifference and desertion were also demonstrated by a smaller proportion of members of the family. Likewise, 42 percentages of collagues were concerned, 39 percentages destroy relationship, remainder did not respond directly. The culture has expressed opposition, too. Outmarital marriages, intimate family relationship distortion, and abuse. Family response to opioid abuse involves denial, guilt, suppressed frustration, sadness, bargaining, anxiety, personality change and co-dependence. Friends and family react differently. A large majority (58 per cent) of family members felt bad in a study done in India; almost two-fifths reported frustration and anger; A study also found that 36 percentages of addicts exhibited unwelcome moods, above 80 percentage of patients use drags. In report use of different drugsa like age 0f 7 'alcohol', 'tobacco', 'cannabis' around 18-20. Many harmful accidents likes solicit, cases, routes incidents regularly happen. Thes concern about studies, approximately 3-4 damage to thairr works. Price for theses very huge, also mainly affected relations. (Daley, 2013)

3.4.7 DEATH RATIO AND REASON:

Each year '11.8 millions' people died due to misuse of drugs by indirectly. Mechanism involved behind death around two, give idea about utilization of drugs. 'DISORDER OF DRUG USE' first reasons also known as direct death in world. By this way dies ratio called 'opioid' overdose, in all greately misuse of drug occur in life of population. When consume more 'alcohol' or any 'illigal drugs' leads to damage whole public like self destruction, kidney failure, hapetitis. Lung cancer happen when people used to smoke more, also other like condition related to Heart, blocking, malitius. 'direct death'; by using foreign drags 3,50,000 humans pass away. Many harder situation happen that time death comes.(NIH, 2017)

'Alcohol' :

Consumption :

At age of 15 or above that 6.2 litres alcohol consume in 2010 year in that 13.5 gms clear per dayss. All of them 50.2 percentages sold as spirit, also homemade 'alcohol' widely taken. More than 15 yr of age 61.7 percentages not drink alcohol in last year. Numbers of woman more than male for drinking purpose. But little bit variation in given data. Count of dinker are numberless than water drinkers' affect economy. Which regions have higher commercial alaso more consumers.

'The safety consequences':

5.9 % died bcz of harmful liquid in 2012 yrs.

Male deaths are more seen in every years due to alcohols than other gender. Geographically, rigins likes 'EUROPEAN' recorded numbers of deaths ethanol.

3.4.8 DRUGS INTERACTION RESPONSIBLE FOR MAJOR MORTALITY IN DRUG DISEASE

ANALGESIC AND ANTIPYRETIC

DRUGS	FORMU	PRODUCT	OTHER	CONTRAINDICATIONS	SPECIAL	DRUG	ADVERSE
	LATIO	FORM	DRUG		PRECAUTIONS	INTERACTION	DRUG
	Ν						REACTION
Milanci	ACMIL	Capsule			Substantial alcohol	MAOIs	Hallucinations,
pran hcl					abuse,seizure		seizure
					disorder, mania		
Bupreno	BUPRIG	injection		Acute alcoholism,opoid	Toxic	MAOIs,	Addiction,
rphine	ESIC			dependence	psychosis,dependen	alcohol, CNS	abuse,
					ce	depressanats,	misuse
						ketoconazol	
Butopha	BUTRU	Injection			Addiction	CNSdepressannats,	Dependence,
nol	М					Alcohol,	abuse
tartrate						barbiturates,	
						tranquillisers	
	1						

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Ketorola	CADAL	Tablets					
с	AC						
trimetha							
mine							
	KETAN	Injection					
	OV						
Dicyclo	COLIM	Tablets	PARACET			Depressants, narcotic	Hallucinations,m
mine hcl	EX		AMOL			analgesic, tricyclics	ania
	CYCLO	Tablets	PARACET		Alcoholism	CNS depressants	Sedation, confusi
	PAM		AMOL				onal
							state,hallucinatio
							ns,mania
Duloxeti	DELOK	Capsules					
ne							
Acetylsa	DISPRI	Tablets	Calcium			NSAIDs,heavy	
licylic	Ν		carbonate,a			alcohol abuse	
acid			n citric acid				
Tramad	DOMA	Tablets	PARACET	Acute intoxication with	Drug dependence,	CNS	Dependence, habi

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ol hcl	DOL		AMOL	alcohol, hypnotics, opoids,	Abuse	depressants, alcohol,	tuation,abuse
	PLUS			psychotropics		carbamazepine,	
						SSRIS,TCADs,MA	
						OIs,quinidine	
	TRAMA	Injection		Acute intoxication with		CNS	Abuse, dependen
	ZAC			alcohol, hypnotics, opioids,		depressants, alcohol,	ce,CNS
				psychotropics		carbamazepine,SSRI	Stimulant, depres
						s	sion,
						TCADs,	Hallucination,
Fentanyl	DUROG				Drug nd alcohol	CNS	Euphoria,
	ESIC				abuse	depressants,MAOIs,	hallucinations,
					tolerance,dependen	alcohol,CYP3A4	pruritus,
					ce	Inhibitors	Addiction,
							abuse,
							dependence,
							Alcohol and
							other drugs
	FENDR	Injection		Opioid hypersensitivity		CNS	Tolerance,depen
	OP					depressants, neurolep	dence,CNS
						tics,narcotics	depressants, hallu

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						analgesic,alcohol	cinations,
							Sedation
Pentazo	FORTA	Tablets	PARACET	Narcotic dependence	Acute alcohol		Sedation, depend
cine	GESIC		AMOL		intoxication		ence,
HCL							Depression
Gabape	GABAP	tcaps				CNS	
ntin	IN					depressants, alcohol,	
						morphine	
	NEURO	tcaps				CNS	Withdrawal
	NTIN					depressants, alcohol,	seizure
						morphine	
Tapenta	LUCYN	Tablets			Drug abuse, seizure	MAOIS,alcohol,BD	Dependeence,ad
dol	ТА					Z,barbituarates,opioi	diction, abuse,
						ds,	Misuse, confusio
						CNS	n,hallucination,
						depressanst,SSRIs	Depression
Carbam	MAZET	Tablets		Psychosis, sensitivity to	Seizure,	MAOIs,TCADs,BD	
azepine	OL			TCA		Z,SSRIs,phenytoin,a	
						lprazolam	
	TEGRIT	Tablet		Sensitivity to		BDZ,alcohol,MAOI	

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	AL			oxacarbasepine,TCA,		s,TCA,tramadol,phe	
				Phenytoin		nytoin,	
						Phenobarbital, alpraz	
						olam	
Mefena	MEFTA	Suspension	PARACET				
mic acid	GESIC P		AMOL				
	MEFTA	Tablets	PARACET				
	L		AMOL				
	FORTE						
	MEFTA	Tablets			Alcoholics		CNS effect
	LP						
	MEFTA	Tablets	Dicyclomin		Alcoholics history	Alcohol,CNS	Confusion, delusi
	L SPAS		e hcl			depressanats,narcoti	on,mania,
						c analgesic,	Hallucination
						Phenothiazine	
	PONST	Tablet			Alcoholics		CNS effect
	AN						
Morphin	MORCO	Tablets		Acute alcoholism		MAOIs,CNS	Tolerance,depen
e	NTIN					depressants,alcohol	dence,abuse,
sulphate	CONT					phenothiazines	Addiction, misus

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							e,euphoria
PARAC	PACIM	Tablets					
ETAM	OL						
OL							
	PARACI	Tablets					
	Ν						
	ZIMAL	Tablet	Caffiene		Alcoholism	Alcohol, hypnotics	Heavy alcohol
	GIN		anh,				users
			Codiene				
			phos				
Pentazo	FORTW	injection		Narcotic	Acute alcohol	MAOIs,TCA,phenyt	Psychomimetic
cine	IN			dependence,acute	intoxication	ion,CNS depressants	effect,hallucinati
lactate				alcoholism		narcotics,alcohol,	ons
	PENTA	Injection		Narcotic dependence	Acute alcohol	MAOIs,TCA,phenyt	Sedation, depend
	WIN				intoxication	oin,CNS	ence,
						depressants,	Psychomimetic
						Narcotics, alcohol	effect
Pregabal	PREGA	capsules					
in	BID						
Dicyclo	SPASM	Injection	Diclofenac			CNS	Psychosis, halluci

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amine	0 EODTE		sodium			depressanats,narcot	i nation,
	FORTE					c analgesic	Delusion
				НҮ	PNOTICS		
DRUGS	FORM	PRODUC	OTHER	CONTRAINDICATI	SPECIAL	DRUG INTERACTION	ADVERSE
	ULATI	T FORM	DRUG	ONS	PRECAUTIONS		DRUG
	ON						REACTION
Flurazepa	FLUR	capsules			Depressnnats	CNS	CNS depression
m Hcl	AZ					depressants, alcohol,	
Nitrazepa	NITRA	tablets		Chronic psychosis	History of drug or	Alcohol,CNS	
m	VET				alcohol	depressants	
					abuse		
	NITRO	tablets		Chronics psychoses	Past of medicines or	Alcohol,CNS	Confusion
	SUN				liquor misuse	depressants	
Triclofos	PEDIC	liquid			Histories of drugs		Confusion
sodium	LORY						
	L						
Zaleplon	ZASO	capsule			History of alcohols	Alcohol,hypnptics,narco	CNS
					Dependence	tic	disturbance,
						analgesics	

KINJAL PATEL

Zolpidem	ZOLFR	tablets	Psychotic illness	History about Abese,	CNS depressanats(BDZ,	Depression, conf
	ESH			depression	TCA,OPIOIDS)	usion,
						Hallucination, ab
						use,tolrance
						Dependeence
Zopiclone	ZOPIC	tablets		History of drug or	Alcohol,CNS	Confusion,depre
	ON			alcohol	depressanats	ssed mood,
				Abuse, depression, epil		Hallucinations,ps
				epsy		ychological
						disturbance
Melatonin	ZYTO	tablets	Severe mental illness	History of other	Steroids,nicotine,alcohol	Hallucination
	NIN			neurological disorder	,	
					BDZ,quinolones,carbam	
					azepine	
	I		1			

SEDATIVE AND TRANQUILLISERS

DRUG	FORMUL	PRODUC	OTHER	CONTRAINDICATI	SPECIAL	DRUG INTERACTION	ADVERSE
S	ATION	T FORM	DRUG	ONS	PRECAUTIONS		DRUG
							REACTION

KINJAL PATEL

Asenap	ALKEPIN	Tablets	Psychosis	History of seizure,	Alcohol, CNS	Sedation
ine				Suicidal behaviour	depressants	
Alpraz	ALPRAX	Tablets			Alcohol, CNS	CNS disturbance
olam					depressanats	
	ZOLAM	Tablets	Ketoconazole	Dependence	Alcohol, CNS	CNS
					depressants, carbamazepi	disturbance, seizu
					ne	re
Aripipr	ARIP-MT	Tablets		Seizure	Alcohol,CNS drugs	Suicidal risk
azole						
Hydrox	ATARAX	Tablets		Psychosis,alcohol,Abu	alcohol,MAOIs,CNS	
yzine				se	depressants	
Loraze	ATIVAN	Tablets			Alcohol, CNS	CNS
pam					depressants	disturbance,conf
						usion
		Tablets		Psychosis, history of	alcohol,CNS	Confusion,CNS
	LARPOS			alcohol and drug	depressants	disturbance
	Е			abuse,suicidal		
				tendencies		
Buspir	BUSPIN	Tablets	Epilepsy	Alcohol	alcohol,MAOIs,diazepa	Confusion
one				abuse,Depression	m,CNS depressants	

KINJAL PATEL

HCL						
Diazep	CALMPO	Tablets	Chronic psychosis	depression	alcohol,caffeine,CNS	CNS
am	SE				depressants	disturbance,
						Confusion,depen
						dence,psychologi
						cal reaction
	VALIUM	Tablets	Chronic psychosis	Alcohol,abuse	alcohol,phenytoin,CNS	CNS disturbance
					depressants	
Zuclop	CLOPIXO	Tablets	Acute alcohol,CNS		Alcohol, hypnotic, TCA, b	
enthixo	L		Depression,Barbiturat		arbiturates,,CNS	
1			е,		depressants	
			Opiate intoxication			
Clobaz	FRISIUM	Tablets	History of	Depression, psychosis,	alcohol,CNS	Depression, suici
am			drug/alcohol	abuse	depressants	dal ideation
			Dependence			
Midazo	FULSED	Injection	Acute alcohol	History of alcohol and	Alcohol,ketoconazol,CN	Hallucination,co
lam			intoxication	drug	S depressants	nfusion,
HCL				abuse		Dependence,tole
						rance,

KINJAL PATEL

						Sedation
Phenob	GARDEN	Tablets	Severe depression	Dependence	Alcohol, CNS	Dependence,tole
arb	AL				depressants	rance,suicidalide
						ation
IIoperi	ILOSURE	Tablets		Suicidal tendencies	alcohol, CNS	
done					depressants	
Propan	INDERA	Tablets			alcohol,MAOIs,	Depression,CNS
olol	L				NSAIDs,TCA, ,CNS	disturbance
HCL					depressants	
Chlordi	LIBRIUM	Tablets		Psychosis, history of	alcohol,CNS	Confusion,CNS
az				alcohol and drug	depressants	disturbance
epoxid				abuse,suicidal		
e				tendencies		
Clozapi	LOZAPIN	Tablets	Chronic psychosis,	History of alcohol and	alcohol,CNS	Dependence,conf
ne			Depression	drug	depressants	usion,psycho
				abuse,depression,suici		Logical reaction
				dal tendencies		
	SIZOPIN	Tablets	CNS		alcohol,MAOIs,BDZ,C	
			depression, alcoholic		NS depressants	

KINJAL PATEL

			And toxic			
			psychoses,drug			
			intoxication			
Lurasid	LURAMA	Tablets	Seizure	Suicidal behaviour		
one	Х					
HCL						
Olanza	OLEXA	Tablets		Suicidal behaviour,	CNS	Hallucination
pine				Depression	drugs,alcohol,nicotine,B	
					DZ	
	TOLAZ	Tablets	CNS depression	History of seizure	TCA,CNS depressants	Depression
	MD					
Pimozi	ORAP	Tablets	CNS depression		alcohol,CNS	Depression
de					depressants	
Fluphe	PROLINA	Injection		History of seizure	CNS active agents,	Pruritus, depressi
nazine	TE				TCA,SSRIS,phenytoin,	on
decan					BDZ,alcohol,	
					carbamazepine	
Risperi	RISINIA	Tablets	Seizure	Suicidal behaviour		
done						

KINJAL PATEL

	RISPERD	Tablets		History of seizure	CNS active	Depression, prurit
	AL				agents,alcohol,TCA,SS	us
					RIs, phenothaizines,	
					Phenytoin,BDZ	
Halope	SERENA	Tablets	CNS depression	Depression	TCADs,quinidine,CNS	CNS disturbance
ridole	CE				depressanats, sedatives, al	
					cohol,	
					Carbamazepine,ketocon	
					azole	
Quetia	SOCALM	Tablets		History of seizure	alcohol,MAOIs,diazepa	
pine					m,phenytoin,caffeine,hy	
					pnotic,	
					TCA,barbiturates,ketoci	
					nazo, CNS depressants	
Thiorid	THIORIL	Tablets	CNS depression	Seizure	alcohol,MAOIs,,phenyto	
azine					in,carbamazepine,	
					barbiturates,,CNS	
					depressants	
Trifluo	TRINICA	Tablets		CNS depressants	alcohol, phenytoin,CNS	
perazin	LM				depressants	

KINJAL PATEL

	ANTI DEPRESSANTS										
DRU	FORMUL	PRODU	OTHER	CONTRAINDICATI	SPECIAL	DRUG	ADVERSE				
GS	ATION	СТ	DRUG	ONS	PRECAUTIONS	INTERACTION	DRUG				
		FORM					REACTION				
Amitr	AMITONE	Tablets		Mania	History of psychosis,	MAOIs,	Confusion,				
yptyli					Suicidal ideation	barbiturates,	seizure				
ne						alcohol,					
HCL						Phenytoin					
	TRYPTO	Tablets		Mania	History of mania	MAOIs,barbiturates,p					
	MER					henytoin,carbamazepi					
						ne					
Imipra	ANTIDEP	Capsule			History of	MAOIs, barbiturates, ca	CNS				
mine					seizure,mania,	rbamazepine,	disturbance,conf				
					Psychosis	Phenytoin	usion				
	DEPSONI	Tablets		Mania		MAOIs, barbiturates, al	Confusion, seizur				
	L					cohol,carbamazepine,	e				
						Phenytoin					
Citalo	CCITOPA	Tablets			History of	MAOIs,ketoconazole,					
pram	М				seizure,mania,suicidal	TCA,NSAIDs,					
					Ideation	Carbamazepine, alcoho					

KINJAL PATEL

					1	
Clomi	CLOFRAN	Tablets	Alcohol abus	se,epilepsy,	MAOIs,alcohol,CNS	Neurological
prami	IL		psychosis,c	confusion,	depressants,SSRIs,phe	effect,CNS
ne					nytoin	Disturbance, seiz
HCL						ure
Dulox	DELOK	Capsule	History of ma	ania,seizure	MAOIs,SSRIs	
etine						
HCL						
Escital	DEPRANE	Tablets	History o	f mania	MAOIs,SSRIs,alcohol	Suicidal
opram	Х				,carbamazepine,	ideation,worseni
oxalat					NSAIDS	ng of depression
e						
	STALOPA	Tablets	History o	f mania	MAOIs,SSRIs,alcohol	Worsning of
	М				,carbamazepine,NSAI	depression, suicid
					Ds	al
						temdency,acute
						psychosis
Valpr	DIPROEX	Tablets			Barbiturates,alcohol,di	CNS
oic					azepam,MAOIs,carba	disturbance, neur

KINJAL PATEL

acid				mazepine,	ological
				Phenytoin, phenobarbit	effect,suicidal
				al	ideation
Fluox	FLUDAC	Capsule	History of	MAOIs,TCA,phenytoi	Worsning of
etine			seizure,mania,suicidal	n,carbamazepine,NSA	depression,
			ideation	IDs,SSRIs	Mania
	PLATIN	Capsule	History of	MAOIs,TCA,SSRIs,ca	Mania,confusion
			mania,suicidal	rbamazepine,phenytoi	,hallucination
				n,NSAIDs	
Lithiu	LICAB	Tablets		NSAIDs,phenytoin,car	Seizure
m				bamazepine,TCA,stero	
carbon				ids,diazepam,	
ate				SSRIs,TCA	
Mirtaz	MIRTAZ	Tablets	Epilepsy, suicidal	MAOIs,CNS	Suicidal
apine			ideation	depressants,alcohol,B	thinking,confusi
				DZ,SSRIs,ketoconazol	on,seizure
				e	
Rebox	NAREBO	Tablets		MAOIs,TCA,carbama	
etine	Х			zepine	

KINJAL PATEL

Olanz	OLANEX-	Tablets		Suicidal	MAOIS,carbamazepin	
apine	F				e,NSAIDs,TCA,CNS	
					drugs	
Dothie	PROTHIA	Tablets			CNS	CNS disturbance
pin	DEN				depressants,Alcohol,M	
HCL					AOIs,Hypnotics	
Moclo	RIMAREX	Tablets	Confusional	Suicidal ideation	SSRIs,TCA,MAOIs	Confusional state
bemid			state,SSRIs			
e			TCA			
Nortri	SENSIVA	Tablets	Mania	Psychoses	MAOIs,CNS	Neurological
ptylin	L				depressants, carbamaze	effect
e					pine,phenytoin,	
HCL					Barbiturates	
Sertral	SERDEP	Tablets			SSRIs,TCA,diazepam,	CNS disturbance
ine					NSAIDs,alcohol,BDZ,	
HCL					phenytoin	
	SERTA	Tablets		History of mania	SSRIs,TCA,alcohol,N	Worsening of
					SAIDs	depression, suicid
						al tendency

KINJAL PATEL

Fluvo	SOREST	Tablets		Drug abuse	SSRIs,TCA,alcohol,N	Worsening of
xamin					SAIDs	depression, suicid
e						al tendency
maleat						
e						
	UVOX	Tablets		Mania, history of drug	TCA,MAOIs,phenytoi	Suicidal
				abuse	n,barbiturates,SSRIs,c	tendency
					arbamazepine	
Doxep	SPECTRA	Tablets		Suicidal ideation	CNS	Worsening of
ine					depressants,alcohol,SS	depression, suicid
					RIs,MAOIs,barbiturat	al tendency
					es	
Flupe	SPENZO	Tablets	CNS depression	Confusional state	TCA,alcohol,CNS	Confusion, suicid
nthixo					depressants, barbiturate	al ideation
1					S	
Tiane	STABLON	Tablets	MAOIs			
ptine						
Trazo	TRAZOLI	Tablets		Suicidal ideation	Ketoconazole,carbama	Seizure
done	Ν				zepine,CNS	
					depressants, phenothai	

KINJAL PATEL

							zines		
Venlaf	VENLO	DR Caps	ıle			Mania, history of drug	MAOIs,CNS	Woi	rsening of
axine						abuse, misuse	drugs,alcohol,ketocon	depi	ression, suicid
							azole	al	
								tend	ency,pruritus
								,sed	ation,
									confusion
Parox	XET	Table	ets			Suicidal ideation	MAOIs,alcohol,barbit	W	orsening of
etine							urates,carbamazepine,	depr	ression, suicid
							phenobarbital,quinidin		al
							e,phenothiazines	tend	dency,halluci
									nation
				AN	TI EMETIC AN	ID ANTI NAUSEANTS			
DRU	IGS	FORMUL	PRODUCT	OTHER	CONTRAIND	OIC SPECIAL	DRUG		ADVERSE
		ATION	FORM	DRUG	ATIONS	PRECAUTION	S INTERACTIO	N	DRUG
									REACTION
Aprepit	ant	APRELIEF	Capsule				BDZ,phenytoin,pl	neno	Pruritus
							barbital,carbanaz	epi	
			·		•	•			

KINJAL PATEL

Promrthazine	AVOMINE	Tablets	CNS depression	Alcohol,CNS	
				depressants,MAOIs	
Betahistine	BELL	Tablets			Pruritus
HCL	HISTINE				
Meclizine	DILIGAN	Tablets		alcohol,CNS	
				depressants,MAOIs	
Domperidone	DOMSTA	Tablets	Ketocknazole	Keyoconazole	
	L				
Dimenhydrin	DRAMIN	Tablets		CNS	
ate	ATE			depressants, alcohol	
Ondansetron	EMESET	Tablets		Phenytoin,carbamazep	SSRIs,MAOIs
HCL.dihydrat				ine	
e					
	VOMIOF	Tablets		Phenytoin,carbamazep	Pruritus,SSRIs,
				ine,ketoconazole	MAOIs,seizure
Prochlorperaz	EMIDOXY	Tablets	CNS depression	CNS depressants,TCA	
ine maleate	N MD				
Granisetron	GRANICIP	Tablets		Ketoconazole,phenoba	SSRIs,MAOIs
				rbital	

KINJAL PATEL

Metocloprami	MAXERO	Tablets		Phenothiazines	History of depression	MAOIs, phenothiazine	Confusion
de HCL	Ν					s,CNS depressants,	
						Narcotic	
						analgesic,alcohol,SSR	
						Is	
	PERINOR	Tablets		Phenothiazines	History of depressikn	MAOIs, phenothiazine,	Depression, conf
	М					CNS	usion
						depressants,alcohol,SS	
						RIs	
Palonosetron	PALZEN	Injection					SSRIs,MAOIs,se
							izue
Meclizine	PREGNID	Tablets	Caffeine			Alcohol,CNS	
HCL	OXIN					depressants,MAOIs	
Doxylamine	QUEEZY	Tablets				CNS	
succinate						depressants,MAOIs	
Metocloprami	REGLAN	Tablets		Phenothiazine	History of depression	MAOIs, phenothiazine,	Confusion,depre
de mono						CNS	ssion
HCL						depressants,alcohol,SS	
						RIs,narcotic analgesic	

KINJAL PATEL

Prochlorperaz	STEMETI	Tablets		CNS depression		Alcohol,CNS	
ine	L					depressants, phenytoin,	
						TCA	
				ANTI CONVU	JLSANTS		
DRUGS	FORMULA	PRODUCT	OTHER	CONTRAINDIC	SPECIAL	DRUG	ADVERSE
	TION	FORM	DRUG	ATIONS	PRECAUTIONS	INTERACTION	DRUG
							REACTION
Clonazepam	CLOTRIN	Tablets		Alcohol abuse	Depression,addiction,s	Alcohol, CNS	Suicidal ideation
					uicidal ideation	depressants	
	EPITRIL	Tablets		Active drug and	Depression, psychoses, a	Alcohol,CNS	Suicidal
				alcohol abuse	ddiction	depressants	ideation,peuritus
					Suicidal ideation		
Phenytoin	DILANTIN	Kapseals				BDZ,phenothiiazine	
sodium							
	GAROIN	Tablets	Phenoba	Drug abuse and		Alcohol, CNS	Dependence,tole
			rbitone	dependence,		depressants, phenothia	rance
				Depression,		zine,diazepam	Mental
				Suicidal ideation			confusion, suicid
							al ideation

KINJAL PATEL

Valproic acid	DIPROEX	Tablets				Barbiturates,MAOIs,B	CNS
Divalproex						DZ,carbammazepine,	disturbance,suici
sodium						phenyton,phenobarbita	al ideation
						1	
Phenytoin	EPILAN	Tablets	Phenoba	Depression, suicid		Alcohol, CNS	Dependence,tole
			rbitone	al tendencies		depressants, phenothia	rance,
						zine	suicidal ideation
Sodium	EPILEX	Tablets				MAOIs, barbiturates, ne	CNS
valproate						uroleptics,BDZ	disturbance, suici
							dal ideation
	VALPARIN	Tablets				MAOIs, barbiturates, B	Suicidal ideation
	ALKALET					DZ	
	S						
Clobazepam	FRISIUM	Tablets		History of alcohol	Depression, psychosis,, a	CNS	Depression, conf
				dependence	buse	depressants,alcohol,na	usion,
						rcotic analgesic	suicidal ideation
Gabapentin	GABAPIN	Capsules			History of psychotic	CNS	Sedation
					illness	depressants, alcohol	
	NEURONT	Capsules			History of psychotic	CNS	Sedation, pruritus
	IN				illness,addiction	depressants,alcohol,op	,

KINJAL PATEL

					ioids	Confusion,depre
						ssion,suicidal
						deation
Phenobarb	GARDENA	Tablets	Severe	Dependence	Alcohol,CNS	Dependence,tole
	L		depeession		depressants, phenytoin	rance
			Suicidal ideation			Confusion
Lacosamide	LACASA	Tablets		Depression	Phenytoin, phenobarbit	Depression, prurit
					al,ketoconazole	us,
						Hallucination
Lamotrigine	LAMETEC	Tablets			Phenytoin, carbamazep	
					ine,phenobarbital	
Levetiracetam	LEVROXA	Tablets				Psychosis, convul
						sions,
						Depression, conf
						usion,
						Suicidal ideation
Carbamazepi	MAZETOL	Tablets	Psychosis,TCAd,		MAOIs,TCAd,BDZ,al	
ne			Phenytoin		cohol,steroids,phenyto	
					in,phenobabita,SSRIs	
	1	1	1			

KINJAL PATEL

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	TEGRITAL	Tablets	Psychosis,TCAd	Seizure	MAOIs,TCAd,alcohol	Suicidal ideation
			Phenytoin		,BDZ,steroids,phenyto	
					in phenobarbital	
					,SSRIS	
Piracetam	NOOTROPI	Capsules				Depression, suici
	L					dal
Oxcarbazepin	OXRATE	Tablets		Carbamazepine	Alcohol,NSAIDs,phen	Depression, conf
e					obarbital,diazepam,ph	usion
					enytoin	
					MAOIs,CNS	
					depressants	
Pregabalin	PREGABID	Capsules		History of substance	Alcohol,CNS	Suicidal ideation
				abuse	depressants, confusion,	
					sedation	
Topiramate	TOPAMAC	Tablets			Phenytoin,	Suicidal ideation
					carbamazepine,	
					CNSDEPRESSANTS	
Zonisamide	ZONIT	Capsules				Suicidal ideation
						,depression

KINJAL PATEL

NEURODEGENERATIVE DISEASES									
DRUGS	FORMULA	PRODUCT	OTHER	CONTRAINDIC	SPECIAL	DRUG	ADVERSE		
	TION	FORM	DRUG	ATIONS	PRECAUTIONS	INTERACTION	DRUG		
							REACTION		
Entacapone	ADCAPON	Capsules		MAOIs		MAOIs,alcohol,epinep	Hallucination,c		
	E					hrine,	onfusion		
						CNS depressants			
Memantine	ADMENTA	Tablets		History of		Phenytoin, barbiturates	Hallucination,su		
HCL				convulsions			icidal ideation		
Amantadine	AMANTRE	Capsules		History of	Confusion, hallucination,		Hallucination,c		
	L			convulsions	Suicidal ideation		onfusion		
Rivastigmine	EXELON	Capsules			Seizure	NSAIDs,confusion,de			
Hydrogen						pression, hallucination			
tartrate									
Procyclidrine	KEMADRI	Tablets				MAOIs, phenothiazine	Confusion		
HCL	Ν					s,ketoconazole,			
Trihexypheni	PACITANE	Tablets			Psychosis	Phenothiazines, TCAD	Hallucinations,		
dyl HCL						s,MAOIs, alcohol,	euphoria		
						CNSdepressants			

KINJAL PATEL

Pramipexole	PRAMIPEX	Tablets		Psychotic disorder,	Sedative, alcohol, neuro	Confusion,
				hallucination	leptic	hallucination
Interferon	REBIF	Injection	History of severe	History of seizure,	MAOIs,	Suicide
beta 1a			depression,	depression	TCADs,SSRIs	
			suicidal ideation			
Rasagiline	RELGIN	Tablets	MAOIs		TCADs,	Depression,
						hallucination,
						psychotic,
						seizure
Tetrabenazine	REVOCON	Tablets	Depression	History of depression	MAOIs, depressants,	Depression,
					TCADs,alcohol,	suicidal
						ideation,
						confusion
Ropinirole	ROPITOR	Tablets		Psychosis, hallucinations	CNS depressants,	Hallucinations
					phenothiazines, alcohol	
Selegiline	SELGIN	Tablets		Psychosis	MAOIs,	Confusion,
					TCADs,alcohol,	depression,
					CNSdepressants,	psychosis,
						hallucinations
1						

KINJAL PATEL

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Bromocriptin	SICRIPTIN	Tablets		Severe		Alcohol	confusion, CNS
e				psychiatric			disturbance
mesylate				disorder			
Levodopa	SYNDOPA	Tablets	Carbido	Severe	History of convulsions,	MAOIs, BDZ,	CNS
			pa	psychosis	psychiatric	phenytoin, TCADs	disturbance,
					disturbances,		depression,
					depression, suicidal		hallucination,
					ideation		confusion,
							seizure
	II			I			II
				ADHD, Na	rcolepsy		
DRUGS	FORMULA	PRODUC	OTHER	CONTRAINDIC	SPECIAL	DRUG	ADVERSE
	TION	T FORM	DRUG	ATIONS	PRECAUTIONS	INTERACTION	DRUG
							REACTION
Atomoxetine	AXEPTA	Tablets		MAOIs	Suicidal ideation,	MAOIs, diazepam,	Depression,
HCL					depression	phenytoin,SSRIs	sedation,Suicidal
							ideation, manic
							symptoms
Methylpheni	INSPIRAL-	Tablets		History of	Depression ,psychosis,	MAOIs, alcohol	Hallucinations,su
date	SR			suicidal	mania, suicidal tendency	SSRIs, TCA	icidality,

KINJAL PATEL

			tender	ncy, history			Seizure, suicidal
			of	drug or			ideation
			a	alcohol			
			abuse	,dependenc			
				e			
Modafinil	MODALER	Tablets			History of	MAOIs, TCADs,	Depression,
	Т				psychosis,depression,	SSRIs, ketoconazole	hallucination,
					mania,alcohol or drug		psychosis,
					abuse		dependence,
							suicidal ideation
3.4.9 REPORT IN DRUG INTERACTION AND DRUGS OF ABUSE

Over a worlds from sincerely, datawise, healthless community have main target on 'DRG-DRUG INTERACTIONS'. Normally every day thousands compounds were came in market and all have maximum inter communication. To solve this, scienctist needs to find new path to avoid communications. Properties - 'absorption, distribution, metabolism, excretion, treatment effcts' can be change through irrational subjects.(Lindsey et al., 2012) At began of stage' Nonsteroidal anti-inflammatory drugs', 'antibiotics' used as irrationally. Which hus limited effects seems harmful connection with each oithers. 'Serotonin syndrome' main damading disease to life Off humans. Also psychiatric sub-stances hass efficiently dis-order cases. Reaons behind this self-administration, after depend on that and it's 'dependance'. Side effects day by day develop in teenagers with comination of two medicinesss.(Ansari, 2010) One drugs change it structure affect second drug effect and cause major health contamibation, main cause deathof soul. 'Marijuana' with 'cocaines' largely abusing substances. Relations between two medicines have different tharepeutic effects. It is not known easily but many keys involved behind activity. It's means one can change their nature, leads to impairment in routine. (Kaminer et al., 2010)

4. CONCLUSION

The Review illustrated that many disorders relate to brain, specifically CNS, and cause various disorders such as addiction, autism, bipolar disorder catalepsy, meningitis, migrane, multiple sclerosis, alzheimer's disease, parkinson's disorder, and so on. Abuse drugs, i.e. opoids, alcohol, cocaine and their metabolites obviously have control properties of both the neuronal and central immune signals combined to establish the rewarding and dependency bahaviors involved with prolonged exposure. Significant advances in understanding drug-drug interactions have been seen over the past few years, especially in the field of the molecular mechanism by which drugs interact. Many therapies, such as agonists-antagonists, detoxification, recovery programs, medications, self-help organization are used to treat addiction, habits linked to dependency. Substance use disorder has many psychological and family problems associated with it. There are several successful services for prevention, rehabilitation and community support to help individuals and families overcome these issues. The ratio of the drug that is used leads to death is rising day by day and causes many problems. This review includes impact of drug interaction on drug of abuse, various disorders associated with CNS, their treatments, ratio of drug abuse and death, social impact, mechanism involved in drug abuse.

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