

Chapter 2.0
LITERARY RESEARCH

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Yoga being a science of spirituality, does not have direct descriptions related to any disorder including schizophrenia. Hence Ayurveda -one of the ancient literatures on health and disorders, is focused elaboratively pertaining to psychosis and its management with a brief review on mind, different states of mind & control of mind as per *Yoga vāsiṣṭha*, *Māṇḍūkya Upaniṣad*, *Shiva Swarodaya*, *Hatha Yoga Pradipika* and *Patanjali Yoga Sutra*.

2.1 MIND ACCORDING TO YOGIC SCRIPTURES

Concept of mind:

Concept of mind in yogic scriptures is different compared to modern psychology.

According to yoga literature, mind has four aspects(*antaḥkaraṇa*) namely,

manas(mind),

buddhi (intellect),

ahaṅkāra (ego)

citta (memory)

manas is the conglomeration of thoughts, *buddhi* is that which decides or discriminates, *ahaṅkāra* is the sense of 'I'ness and *citta* is the collection of experiences cognitive and emotional.

संकल्पविकल्पातकं मनः।

निश्चयात्मिका बुद्धिः।

आहंकर्ता अहङ्कारः चिन्तनकर्तृ चित्तम् ।

samkalpavikalpātakaṁ manaḥ/

niścayātmikā buddhiḥ/

āhaṅkartā ahaṅkāraḥ cintanakartṛ cittam/

Tattvabodha, Ch: 35, V:1

States of mind:

Sage Vyasa's commentary to *Patanjali Yoga Sutra* defines five states of mind as follows,

kṣipta (disturbed), *mūḍha* (dull), *vikṣipta* (distracted), *ekāgra* (one pointed) and *niruddha* (mastered)

Kṣipta

This state is fully dominated by the *guna* 'rajas'. In this state, the mind is totally restless, jumping from one thought to another, from one emotion to the next and from object to the next.

Mūḍha

The *mūḍha* state is dominated by the *guna* 'tamas' in which the mind is dull, sleepy, lethargic and lacking any alertness. In the *mūḍha* state no productive work can be achieved.

Vikṣipta

There are moments when the *sattva guna* begins to dominate and the mind can find moments of focus and concentration. However, old habits keep pulling the mind away from *sattva* and back to *rajas* or *tamas*. The *vikṣipta* state represents this pulling away from the partial state of concentration.

Ekāgra

In this state the mind is fully focused on the object of meditation and the object becomes fully illuminated, realized and completely known.

Niruddha

In this state no new *samskaras* (impressions) can arise. Even though past impressions still remain, they are made ineffective and can no longer cause any afflictions. In the state of *niruddha* the mind continues to provide its normal functionality. However, it is now fully under the control of the *yogi* and all the *vrittis* (fluctuations) that happen are under the control of the pure, *sattvic buddhi* (intellect) as opposed to being controlled by the ego.

क्षिप्तं मूढं विक्षिप्तं एकाग्रं निरुद्धम् इति चित्तभूमयः

kṣiptam mūdham vikṣiptam ekāgram niruddham iti cittabhūmayah
Yoga vāsiṣṭha also explains about wavering mind as follows,

चेतश्चञ्चलया वृत्त्या चिन्तानिचयचञ्चुरम्।

दृतिं बध्नाति नैकत्र पञ्जरे केसरि यथा।

cetaścañcalayā vṛtṭyā cintānicayacañcuram|
dhṛtiṁ badhnāti naikatra pañjare kesari yathā|

चेतः पतति कार्येषु विगतः स्वामिषेष्विव।

क्षणेन विरन्ति याति बालः क्रीडन कादिव॥

cetaḥ patati kāryeṣu vigataḥ svāmiṣeṣviva|
kṣṇena viranti yāti bālaḥ krīḍana kādiva||

Yoga vāsiṣṭha Ch: I, V: 5 & 6

Controlling the mind:

In yogic tradition, mind is controlled by using an object of focus. The object could be external or internal. Breath is one of the important tool used for controlling the mind. The practice of focusing the mind on object of concentration is spiritually called as *dhāraṇā*.

Dhāraṇā as a tool:

Dhāraṇā is the sixth limb in *Patanjali's ashtang yoga*. It is focusing the mind on an object of concentration

देशबन्धः चित्तस्य धारणा ।

deśa-bandhaḥ cittasya dhāraṇā.

PSY Ch: III, V:1

Sage Vyasa further explains about different objects for concentration as follows,

नाभिचक्रे हृदयपुण्डरीके मूर्ध्नि ज्योतिषि नासिकाग्रे जिह्वाग्रे

इत्येवमादिषु देशेषु बाह्ये वा विषये चित्तस्य वृत्तिमात्रेण बन्ध इति धारणा।१।

*ṅābhicakre hṛdayapuṇḍarīke mūrdhni jyotiṣi nāsikāgre jihvāgre
ityevamādiṣu deśeṣu bāhye vā viṣaye cittasya vṛttimātreṇa bandha iti
dhāraṇā|1|*

Dharana is fixing the mind, through its modifications, to places such as the navel circle, the heart lotus, the shining centre in the head, the tip of the nose, the tip of the tongue, and other such locations; and to external objects.

Another important technique of controlling the mind according to *Māṇḍūkya Upaniṣad* is, activating the mind when it is dull and quietening the mind when it is agitated. The equanimity that would be experienced by this practice, has to be enhanced gradually until it becomes natural. The verse which explain this technique is as follows,

लये सम्बोधयेत् चित्तं विक्षिप्तं शमयेत् पुनः

सकषायं विज्ञानीयात् सम्प्राप्तं न चालयेत्।

laye sambodhayet cittam vikṣiptam śamayet punaḥ

sakaṣāyam vijñānīyāt samaprāptam na cālayet|

Māṇḍūkya Upaniṣad kārīkā: 3.44

‘In a state of mental inactivity awaken the mind; when agitated, calm it; between these two states realize the possible abilities of the mind. If the mind has reached the state of perfect equilibrium then do not disturb it again’

Breath as a tool (for *dhāraṇā*):

Amongst the various objects of focus used for *dhāraṇā*, breath is the most commonly and easily used tool. The relation between breath flow and cerebral activity/laterality is well explained in

1) Swara yoga text- Shiva Swarodaya

2) Hatha yoga scriptures

1) *Swara yoga* on cerebral dominance/laterality:

“Swara” etymologically means the sound of one’s own breath. Swara yoga emphasizes the analysis of breath flow and utilizing the knowledge for modifying the cerebral activity.

Swara yoga explains that the two-major energy(*prana*) circuits, *ida* and *pingala*, can be regulated and controlled by means of the breath.

According to swara yoga *ida*, the negative channel, emanates and terminates on the left side, and has greater control over the left half of the body. Conversely, *pingala*, the positive channel, emanates and terminates on the right side and its influence is greater on the right half of the body. So, if there is disturbance in the rhythm or cycles of the breath, there is likely to be some imbalance in the whole-body system including the cerebral hemispheres.

Ida corresponds to flow of breath in the left nostril (impacting the right cerebral hemisphere) and *pingala* corresponds to flow of breath in right nostril (impacting the left cerebral hemisphere). This relationship of breath flow in the nostril with the corresponding cerebral laterality has been demonstrated with EEG recordings (Werntz, Bickford, Bloom, & Shannahoff-Khalsa, 1982)

इडा वामे स्थिता भागे पिन्गला दक्षिणे स्मृता। ३८

idā vāme sthitā bhāge pingalā dakṣiṇe smrutā 38

Shiva Swarodaya Verse:8

This knowledge of swara yoga is important for two reasons

- a) Breath can be manipulated to alter the cerebral activity
- b) Breath manipulation for modifying the cerebral activity could be used in schizophrenia, which is conceived as a disorder of left hemisphere dysfunction (ref sommer 2001)

2) Hatha yoga on *Kaphalbhati*

The word “kaphal” means skull and “bhati” means shining or illuminating. Kaphalbhati is a high frequency breathing which removes excess kapha and the frontal brain.

भस्त्रावल्लोह-कारस्य रेछ-पूरौ ससम्भ्रमौ |

कपालभातिर्विख्याता कफ-दोष-विशोषणी || ३५ ||

bhastrāvalloha-kārasya recha-pūrau sasambhramau |

kapālabhātīrvikhyātā kapha-doṣha-viśoṣhaṇī || 35 ||

Hatha Yoga Pradipika Ch-2; V:35

Similar to Kaphalbhati is the practice of Bhastrika, which activates the whole brain rather than the frontal brain.

Practices like Kaphalbhati & Bhastrika, (which activates the frontal/whole brain) are important in the context of schizophrenia, as it is established that frontal dysfunction is one of the key features of schizophrenia.

2.2 SCHIZOPHRENIA ACCORDING TO AYURVEDA:

Psychosis and related symptoms are described under the name of *unmāda* in *charak saṁhitā*. The term *unmāda* stands for *samudbhrama* i.e perversion.

Unmāda is characterized by perversion of mind, intellect, consciousness, knowledge, memory, desires, manners, behaviours and interaction with others.

समुद्भ्रमं बुद्धिमनःस्मृतीनामुन्मादमगन्तुनिजोत्थमाहुः।८।

samudbhramam buddhimanah smṛtīnām unmādamagantunijothamāhuḥ/8/

Caraka-saṁhitā, Cikitsā sthāna Ch:9 V:8

It's postulated that imbalances in the *doṣā* leads to diseases in general including *unmāda*.

Etiology of *unmāda*:

- 1) Intake of *viruddha* (mutually contradictory), *dushta* (polluted) and *ashuchi* (impure) foods and drinks
- 2) *Pradharsana* (insult) to the Gods, Gurus and elders.

- 3) Affliction of the mind because of fear and sudden happiness
- 4) Unwholesome physical and mental activities

विरुद्ध दुष्टाशुचि भोजनानि प्रधर्षणं देव गुरु द्विजानाम्।

उन्माद हेतुर्भय हर्ष पूर्वं मनोभिघातो विषमाश्च चेष्टाः ।४।

viruddha duṣṭāśuci bhojanāni pradharṣaṇam deva guru dvijānām|

unmāda heturbhaya harṣa pūrvo manobhighāto viṣamāśca ceṣṭāh|4|

Caraka-saṃhitā, Cikitsā sthāna Ch:9 V:4

Pathogenesis of unmāda:

Vitiation of *doṣā* affects the *hrudaya* (the abode of intellect) of a person having less of *sattva*. It also afflicts the channels carrying psychic impulse and hence the mind.

तैरल्प सत्त्वस्य मलाः प्रदुष्ःआ बुद्धेर्निवासं हृदयं प्रदूष्य।

स्रोतास्यधिष्ठाय मनोवहानि प्रमोहयन्त्याशु नरस्य चेतः॥५॥

tairalpa sattvasya malāḥ praduṣḥā buddhernivāsam hṛdayam pradūṣya|

srotāsyadhiṣṭhāya manovahāni pramohayantyāśu narasya cetah||5||

Caraka-saṃhitā, Cikitsā sthāna Ch:9 V:5

General signs & symptoms:

Some of the common symptoms are intellectual confusion, fickleness of mind, impatience, irrelevant speech and a sensation of vacuum in the heart (empty mindedness)

धी विभ्रमः सत्त्व परिप्लवश्च पर्याकुला दृष्टिरधीरता च।

अबद्धवाक्त्वं हृदयं च शून्यं सामान्यमुन्मादगदस्य लिङ्गम्॥६॥

स मूढचेता न सुखं न दुःखं नाचारधर्मो कुत एव शान्तिम्।

विन्दत्यपास्तस्मृतिबुद्धिसज्जो भ्रमत्ययं चेत इतस्ततश्च॥७॥

dhī vibhramah sattva pariplavaśca paryākulā dr̥ṣṭiradhīratā ca|

abaddhavāktvaṃ hṛdayaṃ ca śūnyaṃ sāmānyamunmādagadasya liṅgam||6||

sa mūḍhacetā na sukhaṃ na duḥkhaṃ nācāradharmau kuta eva śāntim|

vindatyapāstasmṛtibuddhisajo bhramatyayaṃ ceta itastataśca||7||

Caraka-saṃhitā, Cikitsā sthāna Ch:9 V:6 & 7

Types of unmāda

Unmāda could be due to endogenous or exogenous cause. *Unmāda* due to imbalance in the *doṣā* is classified as endogenous *unmāda* and exogenous type includes *unmāda* caused by etiological factors other than vitiation of *doṣā*

Endogenous type includes *vataja unmāda*, *paittika unmāda*, *slaismika unmāda*, *sannipatika unmāda*.

Vataja unmāda

Characterized by an emaciated body, inappropriate lamenting, shouting, laughing, dancing, singing, playing music, posturing; repeatedly and tunelessly imitating the sound of a flute, veena, or other instrument; frothing at the mouth; constantly wandering about; ceaseless talking; using things which are not ornaments as decoration; trying to travel on things which are not vehicles; being greedy for food, but spurning it once it has been obtained.

रूक्षाल्प शीतान्न विरेक धातु क्षयोपवासैरनिलोतिवृद्धः।

चिन्तादि जुष्टं हृदयं प्रदूष्य बुद्धिं स्मृतिं चाप्युपहन्ति शीघ्रम्॥९॥

अस्थानहासस्मितनृत्यगीतवाग्ङविक्षेपणरोदनानि।

पारुष्य कार्श्यारुण वर्णताश्च जीर्णे बलं चानिलजस्य रूपम्॥१०

rūkṣālpā śītānna vireka dhātu kṣayopavāsairanilotivṛddhaḥ/

cintādi juṣṭam hrdayam pradūṣya buddhiṁ smṛtiṁ cāpyupahanti śīghram||9||

asthānahāsasmitanṛtyagītavāgṅgavikṣepaṇarodanāni|

pāruṣya kārśyāruṇa varṇatāśca jīrṇe balaṁ cānilajasya rūpam||10||

Caraka-saṁhitā, Cikitsā sthāna Ch:9 V:9 & 10

Pittaja unmāda

Characterized by threatening behavior & charging at people with stones inappropriately. The patient craves cool shade, water, goes naked, and has a yellow color. He/she sees thing which are not there, such as fire, flames, stars, and lamps. Pittaja insanity results from indigestion, excess of hot, pungent, sour, or burning foods and liquids

अजीर्ण कट्वम्ल विदाह्यशीतैर्भोज्यैश्चितं पित्तमुदीर्णवेगम्।

उन्मादमत्युग्रमनात्मकस्य हृदि श्रितं पूर्वदाशु कुर्यात्॥११॥

अमर्ष संरम्भ विनग्नभावाः सन्तर्जनातिद्रवणौष्ण्यरोषाः ।

प्रचयायशीतान्नजलाभिलाषः पीता च भाः पित्तकृतस्य लिङ्गम्॥१२॥

ajīrṇa kaṭvamla vidāhyaśītaiṛbhōjayaiścitam pittamudīrṇavegam/

unmādamatyugramanātmakasya hr̥di śritam pūrvavadāśu kuryāt||11||

amarṣa saṁrambha vinagnabhāvāḥ santarjanātidravaṇauṣṇyaroṣāḥ /

praccāyaśītānnajalābhilāṣaḥ pītā ca bhāḥ pittakṛtasya liṅgam||12||

Kaphaja unmāda

Characterized by vomiting and a reduction in motivation, appetite, and conversation. It causes a lust for women. It causes the patient to enjoy solitude. He/she dribbles mucus and is very frightening; hates being clean. This *unmāda* is stronger at night, and just after eating.

सम्पूर्णैर्मन्द विचेष्टितस्य सोष्मा कफो मर्मणि सम्प्रवृद्धः।

बुद्धिं स्मृतिं चाप्युपहत्य चित्तं प्रमोहयन् सजनयेद्विकारम्॥१३॥

वाक्चेष्टितं मन्दमरोचकश्च नारीविविक्तप्रियतातिनिद्रा।

चर्दिश्च लाला च बलं च भुङ्क्ते नखादिशौक्यं च कफात्मकस्य॥१४॥

sampūraṇairmanda viceṣṭitasya soṣmā kapho marmaṇi sampravṛddhaḥ|

buddhiṃ smṛtiṃ cāpyupahatya cittaṃ pramohayan sajanayedvikāram||13||

vākceṣṭitaṃ mandamarocakaśca nārīviviktapriyatātīnidrā|

cardiśca lālā ca balaṃ ca bhunkte nakhādiśaukyaṃ ca kaphātmakasya||14||

Sannipatika unmāda

Characterized by all the above-mentioned symptoms simultaneously. It's considered to be incurable.

यः सन्निपात प्रभवोतिघोरः सर्वैः समस्तैः स च हेतुभिः स्यात्।

सर्वाणि रूपाणि बिभर्ति तादृग्विरुद्धभैषज्यविधिर्विवर्ज्यः॥१५॥

yaḥ sannipāta prabhavotighoraḥ sarvaiḥ samastaiḥ sa ca hetubhiḥ syāt|

sarvāṇi rūpāṇi bibharti tādṛgvirudghabhaiṣajyavidhirvivarjyaḥ||15||

Caraka-saṃhitā, Cikitsā sthāna Ch:9 V:15

Exogenous *unmāda* (*Agantuja unmāda*)

Exogenous type of *unmāda* is caused by improper observance of *niyama* (spiritual disciplines) in the present life and improper conduct of the past life which leads to seizures by the Gods, Rishis (Sages), Rakshas (demons) and Pitrus (ancestors)

देवर्षि गन्धर्व पिशाच यक्ष रक्षःपितृणामभिधर्षणानि।

आगन्तु हेतुर्नियमव्रतादि मिथ्याकृतं कर्म च पूर्वदेहे॥१६॥

devarṣi gandharva piśāca yakṣa rakṣahpitṛṇāmabhidharṣaṇāni|

āgantu heturniyamavratādi mithyākṛtaṃ karma ca pūrvadehe||16||

Caraka-saṃhitā, Cikitsā sthāna Ch:9 V:16

Scholars believe that the *Agantuja unmāda* is caused by one's own sinful activities. Some believe it to be caused by intellectual blasphemy. Patient disregards the Gods, ascetics, ancestors, teachers and the other respectable ones. They also resort to undesirable inauspicious activities leading to insanity.

Subtypes of exogenous *unmāda*:

Devonmāda:

The patient would have a gentle look, free from anger, sleep and desire for food, having less of sweat, urine, stool and flatus. He/She emits good aroma from the body and face may look like a blooming lotus.

Guru unmāda :

These patients would have activities and speech as ordained by their preceptors.

Pitru unmāda:

This type of patients would look drowsy with interrupted speech and lack of desire for food.

Gandharva unmāda:

Characterised by violent acts, seriousness, invincibility and liking for dancing, singing, good food, good drinks, incense, perfume, laughing and talking (engagement in humorous talks). Pleasuring aroma would come out from their body.

Yakshonmāda :

Characterized by frequent sleep, cry and laugh, liking for dancing, singing, playing musical instruments, reciting sacred scriptures, telling stories, good food, drinks, bath, garlands, incense and perfumes. Eyes would be red and tearful. Patient would talk ill of elders and may disclose the secrets of others.

Rakshasonmāda:

Characterized by sleeplessness, hatred for food and drinks, excessive strength of patient in spite of his aversion for food, liking for weapons, blood, meat and red garlands and ferociousness.

Brahma Rakshasa unmāda:

Characterized by excessive laughter, dance, hatred and disobedience to the Gods, Vipras (persons belonging to the family of Brahmins) and Physicians. May be proficient in reciting hymns from the Vedas and other scriptures. They might harm themselves.

Pishachonmāda:

Characterized by fickle mindedness. May engage themselves in dancing, singing, laughing and incoherent speech. They may like climbing over uneven places, entering into caves, walking in dirty streets and over dirty clothes, and climbing over heaps of grass, stones and woods. Voice would be broken and hoarse. May remain naked and run here and there. They won't stick to one place.

Management of unmāda:

1. *Snehapana* (internal oleation with medicated ghee)
2. *Mridu shodhana* (mild body purification by emesis or purgation)
3. *Niruha basti* (decoction enema)
4. *Shirovirechana* (medicated nasal drops) and
5. *Sanjna prabodhana* (oral medication to stabilize the mind)

Formulations recommended in *unmāda*:

1. *Kalyanaka ghrita*
2. *Mahakalyanaka ghrita*
3. *Mahapaishacha ghrita*
4. *Lashunadya ghrita*
4. *Unmade gajanakusha rasa*
6. *Saraswata choorna*
7. *Sarsawatarishta*
8. *Sarpagandha ghanavati*
9. *Brihatvata chintamani*
10. *Yogendra rasa*

Specific management guidelines as per the type of *unmāda*:

In *vataja unmāda*, the physician should first of all ascertain the nature of *vata*, and in the beginning, administer *Sneha* (oil, Ghee, etc). If the passage of *vata* is obstructed, then the patient is given laxative along with *Sneha* (oil, ghee etc) only in small quantities.

If caused by *kapha or pitta*, *vamana and virechana* treatments are given, after *snehana* and *swedana*. These therapies are followed up with *samsarjana Krama* (from lighter to heavier diet gradually).

Thereafter, he is given *niruha* (decoction enema), *sneha basti* (oil / fat enema) and *nasya* therapy (therapies for the elimination of *dosha* from the head). Depending upon the predominance of *dosha*, these elimination therapies are required to be administered repeatedly

उन्मादे वातजे पूर्व स्नेहपानं विशेषवित्।

कुर्यादावृतमार्गे तु सस्नेहं मृदु शोधनम्॥२५॥

कफपित्तोद्भवेप्यादौ वमनं सविरेचनम्।

स्निग्धस्विन्नस्य कर्तव्यं शुद्धे संसर्जनक्रमः॥२६॥

निरूहं स्नेहबस्तिं च शिरसश्च विरेचनम्।

ततः कुर्याद्यथादोषं तेषां भूयस्त्वमाचरेत्॥२७॥

हृदिन्द्रियशिरःकोष्ठे संशुद्धे वमनादिभिः।

मनःप्रसादमाप्नोति स्मृतिं सज्जां च विन्दति॥२८॥

शुद्धस्याचारविभ्रंशे तीक्ष्णं नावनमजनम्।

ताडनं च मनोबुद्धिदेहसंवेजनं हितम्॥२९॥

यः सक्तोविनये पट्टैः संयम्य सुदृढैः सुखैः।

अपेतलोहकाष्ठाद्ये संरोध्यश्च तमोगृहे॥३०॥

तर्जनं त्रासनं दानं हर्षणं सान्त्वनं भयम्।

विस्मयो विस्मृतेर्हेतोर्नयन्ति प्रकृतिं मनः॥३१॥

प्रदेहोत्सादनाभ्यङ्गधूमाः पानं च सर्पिषः।

प्रयोक्तव्यं मनोबुद्धिस्मृतिसज्जाप्रबोधनम्॥३२॥

सर्पिःपानादिरागन्तोर्मन्त्रादिश्चेष्यते विधिः॥३३॥

*unmāde vātaje pūrvam snehapānam viśeṣavit/
kuryādāvṛtamāрге tu sasneham mṛdu śodhanam॥25॥
kaphapittodbhavepyādau vamanam savirecanam/
snigdhasvinnasya kartavyam śuddhe saṁsarjanakramah॥26॥
nirūham snehabastim ca śirasaśca virecanam|
tataḥ kuryādyathādoṣam teṣām bhūyastvamācaret॥27॥
hṛdindriyaśiraḥkoṣṭhe saṁśuddhe vamanādibhiḥ/
manaḥprasādamāpnoti smṛtiṁ sajām ca vindati॥28॥
śuddhasyācāravibhramśe tīkṣṇam nāvanamajanam|
tāḍanam ca manobuddhidehasaṁvejanam hitam॥29॥
yaḥ saktovinaye paṭṭaiḥ saṁyamyā sudṛḍhaiḥ sukhaiḥ/
apetalohakāṣṭhādye saṁrodhyaśca tamogṛhe॥30॥
tarjanam trāsanam dānam harṣaṇam sāntvanam bhayam/
vismayo vismṛterhetornayanti prakṛtiṁ manaḥ॥31॥
pradehotsādanābhyaṅgadhūmāḥ pānam ca sarpiṣaḥ/
prayoktavyam manobuddhismṛtisajāprabodhanam॥32॥
sarpiḥpānādirāgantormantrādiśceṣyate vidhiḥ॥33॥*

Caraka-saṁhitā, Cikitsā sthāna Ch:9 V:25-33

Use of panchakarma treatment:

By the administration of *vamana* therapies, the heart, sense organs, head and koshta (Gastro- intestinal tract) gets cleaned as a result of which, the mind gets

refreshed and the patient gains memory as well as consciousness. If, even after the body is cleansed, the patient exhibits perversion of conduct, then he is given *teekhsna navana nasya* – strong inhalation therapy.

Teekshna Anjana – colliers and even beatings which are useful for stimulating his mind, intellect and the body are tried. If the patient has a strong physique, and he/she is disobedient, then he/she is tied tightly without hurting his body, with pieces of cloth, and kept confined to a dark room devoid of iron (rods) and wooden pieces.

The patient suffering from *Agantuja unmāda* is given *pana* (to be taken internally) and mantras to be recited for betterment.

2.3 CONCEPT OF COGNITION IN THE CONTEXT OF YOGA

Cognition is defined as the mental process of acquiring knowledge and understanding through thought, experience and the senses.

According to Patanjali, knowledge can be acquired by direct perception through senses, inference, scriptural references or from person who is authority on scriptures (Iyengar BKS, 2007)

Examples:

Direct perception through senses: feeling cold in a winter season

Inferential knowledge: Inferring the possibility of fire by seeing smoke on a hill top

Scriptures/Person of Wisdom: Desire is the root cause of all our problems

Understanding Social Cognition in the context of Yoga:

Social cognition is defined as mental operations underlying social interactions (Brothers, 1990).

In psychological terms, attribution forms the core of this mental operations guiding our social behaviour. Attribution is the ability to understand and attribute causality for any event happening in our surroundings. Attributing cause could be based on facts, sense perception, past experience or based on

one's belief system. For example, Mr A might feel "he (Mr B) looks very sad and depressed" so let me do prayer for him. Now this single thought would guide the whole set of interactions which Mr A might have with Mr B. Mr A attributes the cause for sadness to something unknown and he believes prayer would help him. If Mr A feels Mr B is a wicked person, then there is chance Mr A might attribute the sadness for Mr B's misdeeds also and his behaviour might vary accordingly. So everything is hinged on how do we understand our self (beliefs, intentions, etc..) and others (their beliefs, intentions, etc..)

Attribution is based on one's beliefs, intentions and also how one perceives the same in other's too. Interestingly sage Patanjali discusses similar concept as *anumāna* (one of the tool for acquiring knowledge. Example-Infering possibility of fire, on seeing smoke over a hill top)). This tool of inference (*anumāna*) would apply very well to the context of social interactions as well. This concept of *anumāna* described by Patanjali is strikingly similar to the concept of Theory of Mind (ToM) popular in the field of social cognition. As the name suggest, it's theorizing about one's mind, which may or may not be correct, but is very essential for social interaction. The very term *anumāna* (*anumāna* means suspecting/guessing) also means theorizing possible causes for an event (Example- "he is crying because, somebody would have scolded him". "Somebody would have scolded" is just a guess/suspicion/theory, it may or may not be true). Though Yoga is a text developed for the inner growth of spiritual aspirant, it does have concepts of social cognition applicable in a therapeutic context as well, which could be used with appropriate modifications in therapy.

Interestingly, Patanjali who defines yoga as *citta-vṛtti-nirodhaḥ* (PYS: I-2) (cessation of *vṛtti* is yoga), mentions knowledge (attained by any of these means) also, as one of the sources of vrittis. Illusion, delusion, sleep and memory are other sources of *vṛtti* (PYS: I-6). Possibly Patanjali agrees that at an ordinary level, all the tools of acquiring knowledge are not entirely fool proof, as until one gets perfection (mostly an ideal concept, not practical in today's world) all the inferences and hence the social or non-social interactions would be coloured by one's own beliefs and intentions which are inherent in all our decisions and inferences.

Recognizing this notion that understanding oneself (including beliefs, desires and intentions) plays a pivotal role in all our interactions with the self and others (similar to simulation theory of ToM), Patanjali says in the third verse of first chapter, “a seer dwells in his original state” (PYS:I-3) (*svarūpa* -pure consciousness which is not coloured by beliefs and intentions) so that the perception, attribution and ensuing interactions (social/non-social) would be least distorted by one’s own beliefs and attitudes.

Going beyond the level of an ordinary person, Patanjali describes a higher level of social connection similar to extra sensory perceptions for aspirants who can focus on the nature of one’s pure-self more intensely.

Some of the experiences which Patanjali discusses are

By *samyama*, one gains the knowledge of the language of all beings (PYS: III-19); acquires the ability to understand the minds of others, divine faculties of hearing, touch, vision, taste and smell (PYS: III-37)

Selected Verses from Patanjali Yoga Sutras (PYS)

योगश्चित्तवृत्तिनिरोधः ॥२॥

yogaś-citta-vṛtti-nirodhaḥ ||PYS: I-2||

तदा द्रष्टुः स्वरूपेऽवस्थानम् ॥३॥

tadā draṣṭuḥ svarūpe-'vasthānam ||PYS: I-3||

प्रमाण विपर्यय विकल्प निद्रा स्मृतयः ॥६॥

pramāṇa viparyaya vikalpa nidrā smṛtayaḥ ||PYS: I-6||

प्रत्यक्षानुमानाअगमाः प्रमाणानि ॥७॥

pratyakṣa-anumāna-āgamāḥ pramāṇāni ||PYS: I-7||

प्रत्ययस्य परचित्तज्ञानम् ॥१९॥

pratyayasya para-citta-jñānam ||PYS: III-19||

ते समाधवुपसर्गा[ः]व्युत्थाने सिद्धयः ॥३७॥

te samādhav-upasargā[h]-vyutthāne siddhayah ||PYS: III-37||

2.4 SUMMARY OF TRADITIONAL LITERATURE REVIEW

Ayurveda has its own classification of *unmāda*- a concept similar to psychosis. Broadly classified as endogenous and exogenous *unmāda*. Specific treatments are also prescribed depending on the type of *unmāda*.

Concepts of social cognition is present in *yoga sutras*. Patanjali's description on *anumāna* (a tool for acquiring knowledge) is similar to what modern social psychology talk as ToM. The bias based approach in social psychology (unlike capacity based approach in psychology) fits well with the descriptions of Patanjali, that all that we perceive are colored by how do we perceive by our self.