

6.0 RESULTS

6.1 PHASE 1: DEVELOPMENT OF YBC FOR SUD

A. Review of articles

From the review of literature, 45 articles were selected initially, out of which, seven books and 18 articles were excluded as they did not meet the study criteria. (Figure 6) The findings from the final list of 24 articles have helped in evolving themes relevant to the application of YBC.(Table 3) Each article was found to have a predominant concept (Table 3) related to YBC and after listing the concepts from each paper, we found out the commonalities amongst the extracted concepts and formulated a set of four general themes and sub-themes pertaining to the application of YBC. Six articles explored the theoretical foundation of YBC, nine discussed the stages of integrating yogic counselling in psychotherapy and four mentioned about the ethical considerations and precautions to be adopted by the counsellor.

Figure 6: Preferred Reporting Items for Systematic Reviews and Meta-Analyses flow chart illustrating the search and screening strategy for the literature review.

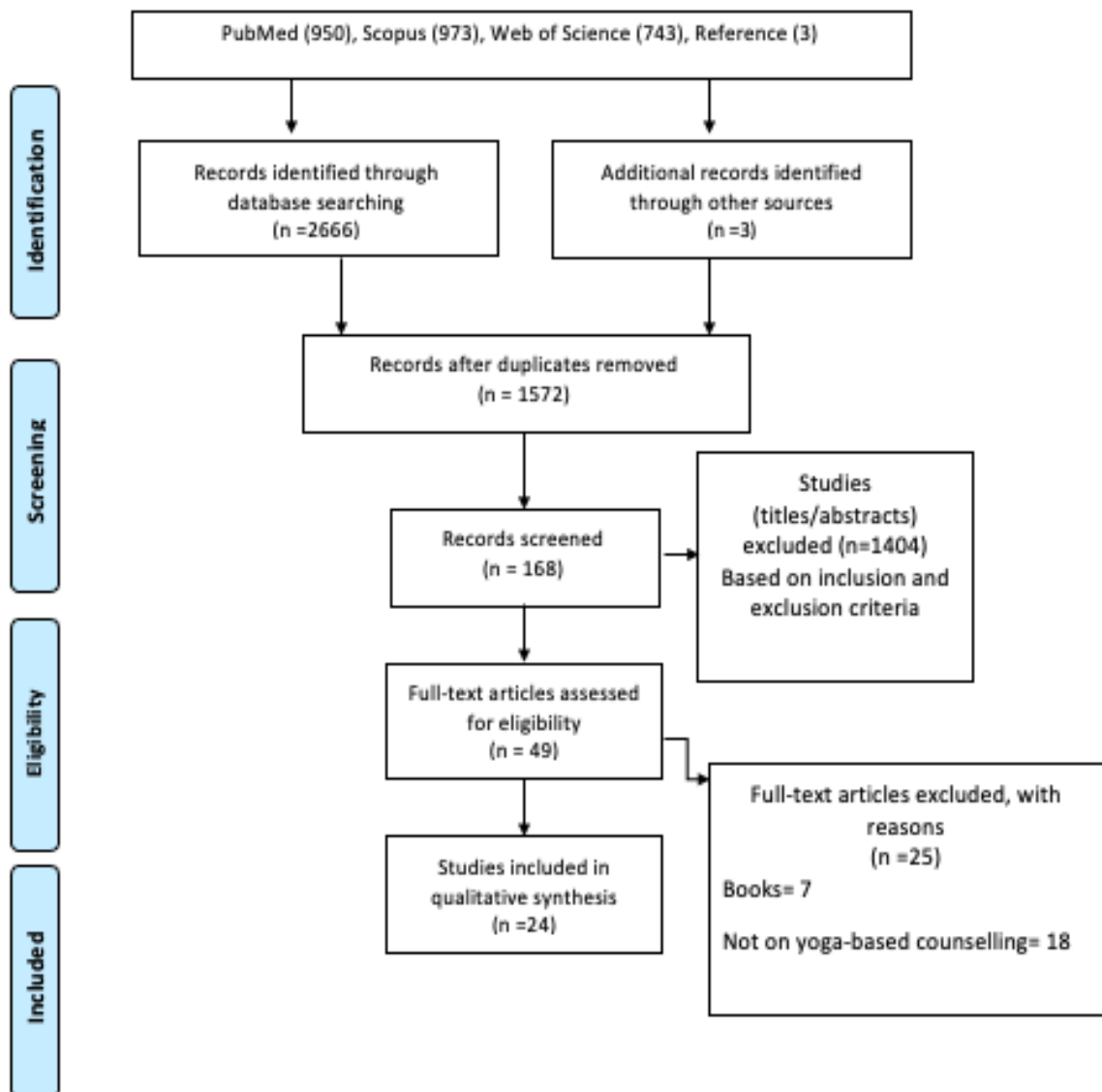


Table 3: List of 24 articles have helped in evolving themes relevant to the application of YBC.

Sl. No.	Author, Year	Aim/Focus of the article	Findings related to YBC	Derived Themes
1	Rybak, 2010	Explore yoga incorporation into therapy and training. Ways in which yoga may be used to enrich group counseling.	- <i>Guna</i> influence, - <i>Yoga nidra, Chakra</i> meditation and its relevance in group therapy. -Expressions through art and storytelling	- Integrating yoga philosophy in counselling
2	Balodhi, 2011	Interpret ancient Indian concepts of BG in modern context for their possible application in clinical set up.	- Cognitive restructuring of <i>Jnana, Karma & Bhakti</i> - Respect patient's beliefs and value system	- Psychotherapy in BG - Ethical consideration
3	Beveridge, 2019	Integration of counselling with yoga through descriptions of the clients' personal experience	- Structure of the YBC components - Importance of counsellor's certification and personal qualities	-Integrating yoga in counselling -Ethical consideration
4	Bhargava, 2017	Mental health issues, psychotherapeutic techniques in India.	-Yamas and Niyamas -Guru Chela relationship -Differences between YBC and PSYC	-Theoretical foundation of YBC

			- BG and YBC	
5	Bhatia, 2013	To explore the parallels between BG and contemporary PSYC	<ul style="list-style-type: none"> - Similarities PSYS and BG. - Analogies between BG and CBT,MET interpersonal therapy. - Krishna the psychoeducator - BG as an adjunct to grief therapy. - Concept of <i>triguna</i> and yoga 	<ul style="list-style-type: none"> - Similarity between BG and PSYC - Theoretical foundation of YBC - Anecdotes in BG and its use in counselling
6	Caplan, 2013	To provide an insight on the integration of western psychology and ancient yogic wisdom	<ul style="list-style-type: none"> - Yoga and psychology are complementary -Method of application of yoga in counselling 	Integrating yoga in counselling
7	Forfylo w, 2011	To provide empirical research on yoga as an effective, complementary, clinical intervention for anxiety and depression	<ul style="list-style-type: none"> -Informed consent required - Psychoeducation about treatment method -Consent for touch during yoga -Importance of client's interest and commitment to yoga practice - Therapist's certification required - Avoid harm 	<ul style="list-style-type: none"> - Integrating yoga in counselling - Ethical consideration

8	Jacob, 2003	To provide anecdotes, themes of Ramayana and PSYC	<ul style="list-style-type: none"> - Lack of trained therapists - Operational model of yoga service needs reconfiguration 	<ul style="list-style-type: none"> - Integrating yoga in counselling - Ethical consideration - Anecdotes in Ramayana and its use in counselling
9	Kamradt, 2017	To provide an overview of the history of yoga, scientific evidence and ethical framework to integrate yoga PSYC.	<ul style="list-style-type: none"> - Tailored therapy for client's needs - Ethical consideration and precautions required: consent, physical contact, accreditation of therapist, record keeping and harm minimization - Yoga psychoeducation 	<ul style="list-style-type: none"> - Integrating yoga in counselling - Ethical consideration
10	Manickam, 2013	To present an integrative model of change based on Indian thought, with psychological concepts of UPA, Ayurveda, BG and Yoga.	<ul style="list-style-type: none"> - <i>Pancha kosha, Triguna, pancha mahabhutas, tridoshas</i> - BG explains the therapeutic flexibility 	<ul style="list-style-type: none"> - Integrating yoga in counselling - Theoretical foundation of YBC - Anecdotes of BG and YBC
11	Panda, 2017	BG's usefulness as a model of counseling	<ul style="list-style-type: none"> - The therapeutic process in BG - Krishna the therapist - Guru-Sishya relationship. 	<ul style="list-style-type: none"> - Integrating yoga in counselling - Theoretical foundation of YBC

12	Patwardhan, 2016	To critically examine the pros and cons of integrating yoga with PSYC	<ul style="list-style-type: none"> - Lack of trained therapists - Operational model of yoga delivery needs reconfiguration - Concept of "I" in PSYC and yoga 	<ul style="list-style-type: none"> - Integrating yoga in counselling - Integrating yoga in YBC and stages of counselling - Ethical consideration
13	Prem, 1994	Adapting PYS's psychology into a clinical model of PSYC	<ul style="list-style-type: none"> - Theoretical application of Yoga philosophy in PSYC - Proposed yoga counselling model includes - Stages of counselling - Case study 	<ul style="list-style-type: none"> - Integrating yoga in counselling - Stages of YBC - Theoretical foundation of YBC based on PYS - Ethical consideration
14	Reddy, 2012	To discuss the therapy process involved in BG	<ul style="list-style-type: none"> - Similarities between PSYC and BG - Concept of <i>karma, bhakti sanyasa, vijnana, vishwaroopa sandarshan yoga</i> <i>Guru-Sishya</i> - Krishna the therapist 	<ul style="list-style-type: none"> - Theoretical foundation of YBC based on BG
15	Satish, 2014	The application PYS in counselling: issues and limitations	<ul style="list-style-type: none"> - Concept of <i>manas, chitta, prasadanam, klesha, prashna</i> according to PYS - Case Vignette 	<ul style="list-style-type: none"> - Theoretical foundation of YBC based on PYS

				- Integrating yoga in counselling
16	Shapiro, 2013	To bring yoga postures in the context of body PSYC	- Training in both body PSYC and yoga required - YBBP and the Universal Principles of Alignment - Stages of YBBP - Five Fundamental Actions	- Characteristics of the counsellor - Stages of YBC
17	Bhide, 2021	To analyse anecdotes of counselling in Ramayana and negative emotions	-Anecdotes of counselling in Ramayana and negative emotions. - Concept of <i>Dharma</i> and <i>Karma</i>	- Similarities between counselling techniques and Ramayana - Integrating Ramayana in YBC
18	Villacres, 2014	To define and decode the conceptual framework of IAYT.	-YBC done through <i>maitri milan</i> or lectures - YBC acts as psychoeducation of patients to understand the the illness, IAYT process and psychology of yoga - Stakeholders highlight the benefits of YBC	-YBC as an integral part of IAYT -Stages of YBC

19	Chowdhary, 2013	To fill the literature gap by comparing the trance state in hypnosis with yoga	-Psychological concepts and process of hypnosis in PYS - <i>Samadhi</i> - Psychological schemas and PYS's <i>citta vritti</i> - Concept of cognitive theory and cognitive hypnotherapy and the five <i>vrittis</i> -Psychotherapy is curative but PYS is preventive	-Similarity between hypnosis and PYS -Theoretical foundation of YBC based on PYS
20	Dabas, 2018	To study the efficacy of Indian and western positive interventions in semi-urban Indian school students	- Similarities between Positive psychology and Indian Scriptures - ISBI improving personal well-being rather than just psychiatric symptoms - ISBN was more effective in increasing the positive constructs of hope, optimism and resilience	-YBC's outcome may be influenced by patient's culture -YBC may have positive impact on well-being
21	Pillay, 2008	To highlight the divergent and intersecting epistemologies of <i>Vedanta and its relevance to mental health professionals</i>	- Application of <i>vedantic</i> and <i>upanishadic</i> psychology in counselling	-Theoretical foundation of YBC based the UPA

22	Adams, 2015	To address methods of incorporating yoga into college counselling	- Ethical consideration of IAYT - Importance of yogic life style -Yoga complements traditional talk therapy -Regular <i>hatha</i> yoga practice, aspects of <i>karma</i> and <i>bhakti</i> yoga in treatment plans.	- Ethical consideration - Integrating yoga in counselling
23	Kumar, 2013	Karma yoga in BG and its relation with positive psychology.	- Karma yoga as therapeutic method to reduce anxiety	- Integrating yoga in counselling
24	Shukla, 2014	To contrast the approach of the Bhagwat Gita with existential psychotherapy	- Therapeutic approach of Existential PSYC - Therapeutic approach of BG - Krishna the counsellor	- Integrating yoga in counselling - Theoretical basis of YBC based on BG

A. Review of ancient and contemporary books

Furthermore, from the literature review of books integrating yoga and counselling, namely: Counselling and Guidance by R. A. Sharma and R. Acharya, Yoga and Psychotherapy: The Evolution of Consciousness by Swami Rama, Rudolph Ballentine, and Swami Ajaya, The Integrated Approach to Yoga Therapy for Positive Health by Dr. R. Nagarathna and Dr. H.R. Nagendra, Yoga for Mental Health and Beyond by Dr. R. V. Vaidya, Yoga Vasistha by Swami Venkatesananda, Bhagavad Gita: A New Translation by Swami Sivananda, the following themes were derived: Practical Integration of Yoga Principles, Self-Inquiry, Lifestyle modifications, applications of Sage Patanjali's eight limbs of yoga, self-inquiry, integrating

relaxation techniques/special techniques in counselling, schools of yoga, Yogic Theoretical Concepts related to counselling. (Table 4)

Table 4: Themes related to YBC derived from books

Book Title, Author, Year	Findings Related to YBC	Themes Explored
Dr. Latha Satish, Yoga and Mental Health, 2018	Integration of Yoga Practices in Counselling, Efficacy of Pranayama and Dhyana Techniques, Importance of Ethical Conduct (Dharma) and Self-Inquiry (Svadyaya) in Therapeutic Settings	Practical Integration of Yoga Principles, Self-Inquiry, Integrating Relaxation Techniques in Counselling
Swami Ajaya, Yoga Psychology, 2002	Psychological Benefits of Yoga, Application of Yogic Principles in Psychotherapy, Self-Exploration through Dhyana and Asanas (Kaya-Manasika Swasthya)	Practical Integration of Yoga Principles, Self-Inquiry
R. A. Sharma and R. Acharya, Counselling and Guidance, 2010	Incorporating Yoga into Counselling Practice, Ethical Guidelines for Counsellors, Importance of Personal	Practical Integration of Yoga Principles, Lifestyle Modifications (Dinacharya and Ritucharya), Self-Inquiry

	Growth and Development for Effective Counselling (Svadyaya and Tapas)	
Swami Rama, Rudolph Ballentine, Swami Ajaya, Yoga and Psychotherapy, 1976	Utilizing Yoga for Mental Health, Integration of Yogic Practices with Psychotherapy, Spiritual Growth through Dhyana and Self-Reflection (Atma Vichara)	Practical Integration of Yoga Principles, Self-Inquiry, Integrating Relaxation Techniques/Special Techniques in Counselling
Dr. R. Nagarathna and Dr. H.R. Nagendra, The Integrated Approach to Yoga Therapy for Positive Health, 2008	Therapeutic Benefits of Yoga, Holistic Approach to Health, Individualized Yoga Practices for Clients (Yoga Chikitsa)	Practical Integration of Yoga Principles, Lifestyle Modifications (Dinacharya and Ritucharya)
Dr. R. V. Vaidya, Yoga for Mental Health and Beyond, 2015	Yoga for Emotional Well-being, Integration of Yoga into Modern Mental Health Care, Utilizing Yoga for Stress Management and Mental Clarity (Chitta Vritti Nirodhah)	Practical Integration of Yoga Principles, Integrating Relaxation Techniques/Special Techniques in Counselling
Swami Venkatesananda,	Philosophical Insights into	Self-Inquiry, Integrating

Yoga Vasistha, 1984	Yoga, Practical Application of Yoga Principles, Self-Inquiry and Detachment in Spiritual Growth (Vairagya and Atma Vichara)	Relaxation Techniques/Special Techniques in Counselling
Swami Sivananda, Bhagavad Gita: A New Translation, 2013	Ethical Guidelines from the Gita, Importance of Duty (Dharma) and Righteousness (Sattva), Spiritual Insights for Personal Growth and Development (Atma Vichara)	Practical Integration of Yoga Principles, Integrating Relaxation Techniques/Special Techniques in Counselling
Swami Vivekananda, Meditation and Its Methods, 2014	Techniques for Mind Control (Chitta Vritti Nirodhah) and Concentration (Dharana), Importance of Meditation for Mental Health, Self-Realization through Yogic Practices (Atma Vichara)	Practical Integration of Yoga Principles, Integrating Relaxation Techniques/Special Techniques in Counselling

C. Interview of experts

The insights gathered from interviews with experts for the development of a yoga-based counseling module for substance use disorder (SUD) revealed several prominent themes. (Table 3) Integrating yoga philosophy and practice emerged as a unanimous priority among all

six experts, with a ratio of (6:6 experts), encompassing concepts such as Triguna, Pancha Kosha, and the 8 limbs of yoga. While only one expert, H.B., specifically emphasized the importance of understanding SUD in terms of neurobiological aspects, the majority underscored the significance of psychoeducation (5:6), practical applications (6:6), and lifestyle modifications (4:6). Practical techniques like storytelling, relaxation methods, and cognitive tasks were universally recommended, alongside lifestyle adjustments such as adopting a yogic diet and managing sleep patterns. Additionally, the importance of the counselor's knowledge and authenticity was highlighted as essential for effective intervention, with a ratio of 2:6 among the experts. Overall, while opinions varied on specific emphases, the collective insights emphasized a holistic approach to addressing SUD through the integration of yoga principles and practices into counseling strategies.

Table 5: Derived themes from interviews with six YBC experts

Expert Initial	Expert's Input	Derived Themes
H.B.	<ul style="list-style-type: none"> - Psychoeducation: Integration of yoga and YBC - Philosophical Concepts: Triguna, Shreyas and Preyas, Dosha, Koshas - Practical Focus: Storytelling, testimonials, relaxation techniques, interactive sessions, sankalpa, homeworks - Understanding SUD: Neurobiological aspects, anatomy of yoga and SUD, reward pathway, motivation 	<ul style="list-style-type: none"> - Integration of yoga philosophy and practice - Practical methods for relaxation and engagement - Understanding neurobiological aspects of SUD

	<ul style="list-style-type: none"> - Precautions: Avoiding Kapalabhati, medication interactions, excessive philosophies, overactivation of sympathetic nervous system 	
V.M.	<ul style="list-style-type: none"> - Philosophical Concepts: Pancha Kosha model, Karma Yoga, Bhakti Yoga, Yama, Niyama - YBC Goals: Understanding life and the self - Focus: Motivation, happiness analysis, lifestyle modification, application of the 8 limbs of yoga, yogic diet - Weekly Focus: Specific kosha and related activities - Counselor: Importance of the counselor's knowledge and qualifications 	<ul style="list-style-type: none"> - Holistic integration of yoga philosophy - Motivation and happiness through yogic principles - Structured weekly focus on different koshas - Importance of counselor's knowledge and qualifications
M.A.	<ul style="list-style-type: none"> - Philosophical Concepts: Concept of Mind, intellect, and addiction as per yoga, Raja Yoga, pratipaksha bhavanam samatvam, Panchakosha model - Practical Applications: Asanas to boost confidence, Japa for concentration and meditation, Mastering the Emotion Technique - Adaptation: Practices tailored to individual needs (Gunas) - Lifestyle: Modifications including diet and sleep 	<ul style="list-style-type: none"> - Addressing addiction through yoga philosophy - Practical techniques for mental focus and confidence - Comprehensive lifestyle changes including diet and sleep
S.K.	<ul style="list-style-type: none"> - Philosophical Concepts: True Ananda (Happiness), Raja yoga, Ishwara Pranidhana, Samskaras - Lifestyle: Yoga-based modifications - Psychoeducation: Yoga and addiction benefits 	<ul style="list-style-type: none"> - Pursuit of true happiness through yoga instead of drug - Incorporating yoga into daily lifestyle

	<ul style="list-style-type: none"> - Practical Applications: Sleep management with yoga techniques, yogic diet - Practical application : Storytelling, Anecdotes (e.g., Ghirish Chandra Gosh, Sri Ramakrishna, Arjuna, Hanuman, and Jambhavan) 	<ul style="list-style-type: none"> - Educating on the benefits of yoga for addiction - Practical techniques for clearer insights on yoga philosophy
N.R.	<ul style="list-style-type: none"> - Philosophical Concepts: Pancha Kosha, Chetana - Outwardly (Prana); Inwardly (Chitta), Manas Chitta Buddhi Ahankara, Types of Bhavanas, Kleshas, Asmita-Ahankara, Finite Energy concept - Psychoeducation: Yoga and addiction - Practical Applications: Notional correction, Ego vs self, Karma Yoga, Krida Yoga, Asana to increase concentration and awareness, Pranayama to increase prana, Relaxation, Emotion regulation, Backward counting, Japa meditation 	<ul style="list-style-type: none"> - Comprehensive understanding of yogic philosophy and its application - Techniques for mental and emotional regulation - Practical methods to apply concepts of Yoga-based Counselling for addiction
L.S.	<ul style="list-style-type: none"> - Philosophical Concepts: 8 limbs of yoga, Vimarsha, pratipaksha bhavana, types of bhavanas, Raga dwesha, happiness analysis, karma phala, Preyas-shreyas , Krida Yoga - Practical Applications: Asanas to enhance concentration, Backward counting as a cognitive task, Diary writing, Flexible activities, Impulse regulation with pranayama and Japa, Practical application of theories, Involving the care-giver, Follow-up, Participant's open discussion, Interactive activities 	<ul style="list-style-type: none"> - Comprehensive integration of yogic philosophy - Practical cognitive and physical techniques - Involvement of caregivers and interactive activities - Emphasis on counselor authenticity and practice

- Counselor: Authenticity and practice what is preached, genuineness

Following the synthesis of insights from scientific literature reviews, traditional literature reviews, and expert interviews, we identified common themes for a yoga-based counseling module for substance use disorder (Table 5). These themes were discussed with the Chief Medical Officer and YBC expert, Dr. Nagaratna, resulting in the delineation of the module into eight structured sessions. Each session addresses specific aspects of addiction recovery, incorporating yogic practices such as physical postures, breathing techniques, meditation, reflective exercises, goal setting, and relapse prevention strategies. This structured approach provides a comprehensive and integrative pathway for individuals seeking recovery from substance use disorder.

6.2 PHASE 2: VALIDATION OF YBC FOR SUD

The 17 experts had on average 18.2 (\pm 9.3) years of experience. Five experts participated in the first iteration and six in the second and third iterations respectively (Table 6). Items with a CVR score lower than 0.99 were modified based on the comments of the experts. During the first iteration sessions, 5 items scored a CVR Score of less than 0.99 and were modified. During the second iteration sessions, 3 items had a CVR score of 0.67 and were modified for the next iteration. In the third round of iteration, saturation was reached with all items scoring a CVR of 1. The duration of a session ranged from 60 mins to 90 mins and experts suggested not to have more than one session per week. This allows ample time to reflect upon what has been discussed and apply the changes. Most experts suggested the practice of *asanas*, *pranayama*,

and meditation as a separate session, before the counselling sessions. Daily diary writing, follow-up after rehabilitation with monthly meetings, and family support and counselling were suggested by the experts. Another suggestion was to divide the YBC sessions into 12 shorter sessions instead of the original 8 sessions. The experts suggested that the physical and psychological practice (YBC) sessions should be carried out on separate days to avoid physical mental and physical strain.

The qualitative feedback from experts on the YBC intervention is categorized into several key themes. A notable observation was the need for simplification of the Yoga-Based Counseling (YBC) concepts, with suggestions for incorporating metaphors to enhance understanding. Experts also recommended making the intervention more interactive, particularly for clinical populations, to avoid an overly theoretical approach. Emphasis was placed on tailoring the YBC to address specific needs, with one expert highlighting the importance of focusing initially on domains relevant to the disorder while integrating others over time. The delivery of YBC should be linked to mental health outcomes, and it was advised to set realistic expectations for patients regarding the time required to observe changes, which could also improve therapy adherence. Inclusion of dietary advice was proposed, connecting it to yogic concepts such as the Three Gunas and Ahimsa. Experts suggested adding concepts from Yoga Vasishtha and the laws of karma to better address existential questions and enhance understanding. There was a call for integrating philosophical ideas into activity-based counseling to facilitate behavioral change, stressing the importance of sensitizing patients to the value of these practices rather than merely conveying them. Precautions were advised, including careful selection of concepts based on specific disorders and thorough understanding of the patient's background to tailor the intervention effectively. In subsequent sessions, experts recommended incorporating pranayama practices and aligning the intervention with modern medical and cognitive-behavioral methods. Emphasis was placed on controlling

impulsivity, enhancing body awareness, and ensuring that techniques like visualization and mantra use are appropriately timed and individualized. The feedback underscores the need for a flexible, patient-centered approach in delivering YBC to maximize its efficacy in treating substance use disorders. The IYMSUD integrated YBC practices (Table 7) and physical yoga practices (Table 8)

Table 6: Seventeen experts' input during Three iteration validation of the Yoga-based counselling module

Expert	Session 1	Session 2	Session 3	Session 4	Session 5	Session 6	Session 7	Session 8	Aim of the Study	Management of SUD
B.P.	2	2	2	2	2	2	2	2	2	2
T.M.S.	2	2	2	1	0	1	2	2	2	1
P.T.	2	2	2	2	2	2	1	2	2	2
R,R	2	2	1	1	2	2	2	2	2	2
P.	2	2	2	2	2	2	2	2	2	1
1st Iteration										
CVR	1	1	0.6	0.2	0.6	0.6	0.6	1	1	0.2
A.J.	2	2	2	2	2	2	2	2	2	1
V.A.	2	2	2	2	1	2	2	2	1	2
S.T.	2	2	2	2	2	2	2	2	2	2

S.K.	2	2	2	2	2	2	2	2	1	2
J.G.	2	1	2	2	2	2	2	2	2	2
L.S.	2	2	2	2	2	1	2	2	2	1
2nd Iteration										
CVR	1	0.67	1	1	0.67	0.67	1	1	0.67	0.33
K.S.	2	2	2	2	2	2	2	2	2	2
V.K.	2	2	2	2	2	2	2	2	2	2
K.N	2	2	2	2	2	2	2	2	2	2
S.R.	2	2	2	2	2	2	2	2	2	2
N.R.	2	2	2	2	2	2	2	2	2	2
A.J.	2	2	2	2	2	2	2	2	2	2
3rd Iteration										
CVR	1	1	1	1	1	1	1	1	1	1

Table 7: Yoga-based counselling for SUD

Session No.	Yoga Practice Session	Session Theme	Yogic Activities
1	<ul style="list-style-type: none"> · Introduction to Asana, Pranayama, meditation, relaxation (5mins) · Stretching exercises and Quick relaxation Technique (16 mins) · Breathing Exercises (12 mins) · Mind Sound Resonance Technique (10 mins) · Om Meditation (10 mins) 	<p>Introduction session (25 mins)</p> <p>1.Rapport building (5-8 mins)</p> <p>E.g. : Participants sharing name, address, their opinion on yoga, their special qualities and the like.</p> <p>2. Addiction as per Yogic Philosophy (5 mins)</p> <p>Questions to participants :</p> <p>Is addiction a bad habit or a disease?</p> <p>Integrated Approach of Yoga Therapy model of disease</p> <p>Adhija Vyadhi (Stress-born disease)</p> <p>What causes addiction?</p> <p>3. Reflection- (10 mins)</p> <p>Writing down and sharing:</p> <p>What is the root cause of my addiction? (stress, emotion, situation etc.)</p> <p>Effect of my addiction on self and others</p> <p>What is my current state of mind and body?</p>	<p>1. Modified Cyclic meditation- Aim is to slow down and relax:</p> <p>Instant Relaxation Technique</p> <p>Linear Awareness and Centering in Tadasana (Palm Tree pose)</p> <p>Ardha Kati Chakra asana (Half Wheel pose)</p> <p>Deep Relaxation Technique</p> <p>Sankalpa (based on the goal)</p> <p>Inner Silence (20-25 mins)</p>

		<p>4. Goal setting- (5-10 mins)</p> <p>Writing down and sharing:</p> <p>What do I want to achieve by the end of these sessions?</p> <p>5. Introduce Sankalpa (resolve) (5mins)</p> <p>“Choose one personal Sankalapa related to drug recovery. Keep it in the present tense.”</p> <p>The Sankalapa should be constant throughout the therapy. E.g: (I am drug free and clean). It is then repeated 9 times during relaxation techniques.</p> <p>(25 mins)</p>	
2	<ul style="list-style-type: none"> · Stretching exercises (10 mins) · Asanas [with modifications if required] (19 mins) · Breathing Exercises (10 mins) · Modified CM (20 mins) 	<p>Annamaya Kosha and Pranamaya Kosha (25 mins)</p> <p>(Physical Sheath and Vital Energy Sheath)</p> <p>Strengthening the body and its energy</p> <p>1. Feedback of 1st week of yoga practice (3-5 mins)</p> <p>2. Effect of drugs on the body and prana (5 mins)</p>	<p>1. Daily Achievement Diary (3mins)</p> <p>Filling today’s input</p> <p>1. Breath Correction: (8 mins)</p> <p>Breath Observation (1 min)</p> <p>Observe diaphragm/belly movement (1 min)</p> <p>Counting number of seconds/breaths (1 min)</p>

		<p>· “My body with drugs vs without drugs”</p> <p>Explore the symptoms of addiction like fast breath, body weakness, tremors, no control over body etc.</p> <p>Importance of asana and pranayama (breathing practices)</p> <p>Explore how asana and pranayama’s effect on the body and mind.</p> <p>3. Strengthening of willpower and motivation (10 mins)</p> <p>State of being drug-free is achievable</p> <p>Characteristics of a role model/someone who is drug-free</p> <p>Characteristics of my ideal self</p> <p>4. Keeping an Achievement diary (5mins):</p> <p>Participants are given a diary to fill daily.</p> <p>This encourages a sense of discipline and progress</p> <p>The diary has details about their morning/evening practice, karma yoga etc. and participants can point</p>	<p>Conscious Deep Breathing with backward counting (5 mins)</p> <p>2. Deep Relaxation Technique (10mins)</p> <p>Transition to the next activity without breaking the relaxation.</p> <p>3. Visualization Technique based on Marlatt’s Relapse prevention model (10 mins)</p> <p>Participants imagine a high-risk situation like being with a friend who consumes the drug. The outcome is to successfully refrain the participant from using the drug. The visualization evokes the positive feelings that the restraint brings about.</p> <p>Participants imagine their ideal self, in a drug-free state and enjoy this state. (30 mins)</p>
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		<p>out the achievements like cooking for a friend, cleaning, anger management.</p> <p>(25mins)</p>	
3	<ul style="list-style-type: none"> · Stretching exercises (10 mins) · Asanas [with modifications if required] (19 mins) · Breathing Exercises (10 mins) · Modified CM (20 mins) 	<p>Manomaya Kosha (Mind Sheath) (20 mins)</p> <p>1. Feedback of 2nd week of yoga practice (3-5 mins)</p> <p>2. Trigger analysis (10 mins)</p> <p>What are the environments, situations, people, thoughts which trigger my desire for drug?</p> <p>3. Thinking vs feeling vs reacting (10mins)</p> <p>Analysing how a thought leads to emotions which affect our behaviour and decision</p> <p>True joy and love</p> <p>Applying Maitri Karuna Mudita Upekshanam (Friendship, Compassion, Happiness, Equanimity) in daily life.</p> <p>(20 mins)</p>	<p>1. Visualization Technique based on Marlatt's Relapse prevention model (15 mins)</p> <p>Participants imagine a high-risk situation like being with a friend who consumes the drug. The outcome is to successfully refrain the participant from using the drug. The visualization evokes the positive feelings that the restraint brings about.</p> <p>Participants imagine their ideal self, in a drug-free state and enjoy this state.</p> <p>2. Japa meditation (5 mins)</p> <p>Japa writing – of a short phrase/mantra that is meaningful to the participant.</p> <p>E.g. : 'I am drug-free' or 'Om'</p> <p>If the participant is comfortable he/she can</p>

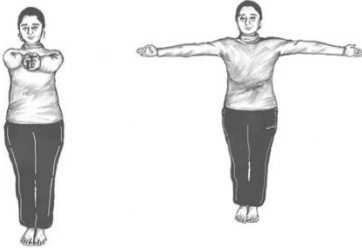
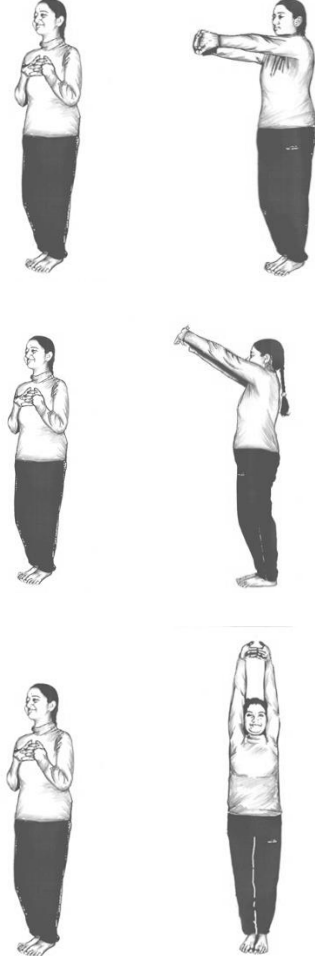
			practice japa aloud or in the mind. (25 mins)
4	<ul style="list-style-type: none"> · Stretching exercises Technique (10 mins) · Asanas [with modifications if required] (19 mins) · Breathing Exercises (10 mins) · Visualization Technique based on Marlatt's Relapse prevention model (15 mins) · Japa meditation (5 mins) 	<p>Manomaya Kosha continued (30 mins)</p> <p>1. Feedback of 3rd week of yoga practice (3-5 mins)</p> <p>2. Pairs of opposite: Shreyas and Preyas</p> <p>What are the things my mind and body find pleasure in? (Preyas-temporary happiness)</p> <p>How do I nurture my soul? (Shreyas-deeper happiness)</p> <p>3. Lifestyle changes according to Yama (self-restrain) and Niyama (personal-discipline)</p> <p>“What are my responsibilities towards self, family, friends, life”</p> <p>“How can I be more disciplined?”</p> <p>Applying one Yama and Niyama each week</p> <p>(Note in the Achievemt Journal)</p> <p>4. Pratipaksha bhavana- Returning to our original state</p>	<p>1. Modified Mind Emotion Technique (15-20 mins)</p> <p>Breath observation</p> <p>Recognition of thinking vs feeling</p> <p>Invoke a positive emotion, intensify the emotion, diffuse the emotion</p> <p>Imagine two opposite feelings like hot and cold</p> <p>Invoke two opposite emotions like anger and happiness and imagine the action towards the emotion.</p> <p>Sankalpa</p> <p>Silence</p> <p>Participants learn to control their emotions and understand the difference between pairs of opposite emotions like anger and love.</p> <p>(20 mins)</p>






		Remember the time your emotions took over your senses Remember your original state where nothing bothers you (30 mins)	
5	<ul style="list-style-type: none"> · Asanas [with modifications if required] (19 mins) · Breathing Exercises (10 mins) · Modified Mastering Emotion Technique (15 mins) · <i>Japa</i> meditation (5 mins) 	<p>Vignanamaya Kosha (Intellectual Sheath) (20 mins)</p> <ol style="list-style-type: none"> 1. Feedback of 4th week of yoga practice (3-5 mins) 2. Notional correction (10 mins) “What is right and wrong?” “What are the thoughts that encourage me to take substances?” 3. Trigger management: (10 mins) “Till now what helps me manage my triggers?” <ul style="list-style-type: none"> · How to apply breathing exercise, nadi shudi, japa or practice one pranayama participant likes more in order to manage triggers (20 mins) 	<ol style="list-style-type: none"> 1. Breath Correction (5-8 mins) 2. Modified Mind Emotion Technique (15-20 mins) 3. Japa meditation (5 mins) (30 mins)
6	<ul style="list-style-type: none"> · Asanas [with modifications if required] (19 mins) 	<p>Anandamaya Kosha (15 mins)</p> <ol style="list-style-type: none"> 1. Feedback of 5th week of yoga practice (3-5 mins) 2. Karma yoga (Yoga of Action) 	<ol style="list-style-type: none"> 1. Achievement diary (5 mins) 2. Japa meditation (5 mins) 3. Visualization Technique based on Marlatt’s Relapse


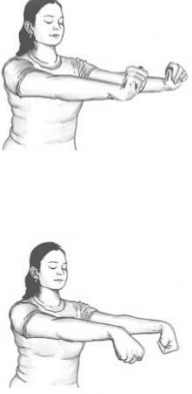

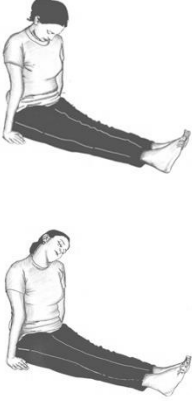

	<ul style="list-style-type: none"> · Breathing Exercises (12 mins) · Modified VISAK · <i>Japa</i> meditation (5 mins) 	<p>“What can I do for others?”</p> <p>Performing action without expectations</p> <p>Do good for others and develop happiness</p> <p>3. Developing a sense of surrender</p> <p>“Is there a higher being whom I can trust fully?”</p> <p>Compassion and love for others and the higher being/ God (15 mins)</p>	<p>prevention model (15-20 mins)</p> <p>(25- 30mins)</p>
7	<ul style="list-style-type: none"> · Asanas [with modifications if required] (19 mins) · Breathing Exercises (12 mins) · Achievement diary (5 mins) · Modified ANAMS · <i>Japa</i> meditation (5 mins) 	<p>Life Management (20 mins)</p> <p>1. Feedback of 6th week of yoga practice (3-5 mins)</p> <p>2. Time management (5-8 mins)</p> <p>Planning daily routines</p> <p>3. Exploring participant’s skills and hobbies (5-8 mins):</p> <p>Hobbies</p> <p>4. Relapse Management (10 mins)</p> <p>Concrete steps to follow in case of relapse</p> <p>(20-25mins)</p>	<p>1. Inspirational drug recovery testimonial (15 mins)</p> <p>2. Visualization Technique based on Marlatt’s Relapse prevention model (15 mins)</p> <p>Participants imagine their ideal self, in a drug-free state.</p> <p>(30mins)</p>


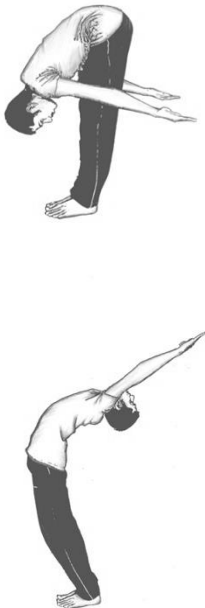


8	<ul style="list-style-type: none"> ·Asanas [with modifications if required] (19 mins) ·Breathing Exercises (12 mins) ·Modified ANAMS (15-20 mins) ·Japa meditation (5 mins) ·Silence <i>Sankalpa</i> (5 mins) 	<p>Conclusion session (20 mins)</p> <ol style="list-style-type: none"> 1. Feedback of 7th week of yoga practice (3-5 mins) 2. Plan for the future 3. Feedback from participants 4. Suggestions from participants <p>(20 mins)</p>	<ol style="list-style-type: none"> 1. Visualization Technique based on Marlatt's Relapse prevention model 2 (15 mins) Participants imagine their ideal self, in a drug-free state. 2. Sankalpa (5 mins) <p>(20 mins)</p>
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Table 8: Yoga practices for SUD

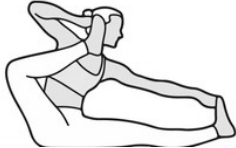






Sl. No	Practice English	Posture	Rounds	Time in minutes
1	Hands In and Out Breathing		5	1 min
2	Hand Stretch Breathing		3x3	1 min



3	Ankle Stretch		5	1 min
4	Half Moon Breathing		5	1 min
5	Cobra Breathing		5	1 min
6	Half Locust Breathing		5x2	1 min
7	Bow pose Breathing		5	1 min

8	Fingers movements		5	30 secs
9	Wrist rotation		5	30 secs
10	Shoulder rotations		5	30 secs
11	Neck movement –up and down, sideways		5	1 min
12	Neck rotation		5	30 secs

13	Side bending		5	30 secs
14	Forward and backward bending		5	30 secs
15	Quick Relaxation Technique		-	5 mins
16	Palm tree pose		1	1 min

17	Waist rotating pose		1	1 min
18	Half waist sliding pose		1	1 min
19	Half wheel bend pose		1	1 min
20	Hand to foot pose		1	1 min
21	Triangle pose		Both sides	1+1 mins

22	Bow and arrow pose		Both legs	2 mins
23	Half moon pose		1	1 min
24	Hare pose		1	1 min
25	Back stretching pose		1	1 min
26	Twisted pose		Both sides	1+1 mins
27	Camel pose		1	1 min
28	Cow's face pose		Both legs	1+1 mins

29	Fish pose		1	1 min
30	Snake pose		1	1 min
31	Frontal brain cleansing breath		20-40 strokes	3 mins
32	Alternate nostril breathing		5	3 mins
33	Humming bee breathing		5	2 mins
34	Psychic breath		5	2 mins
35	Cooling breath		5	2 mins
36	Naadaanusandaana or Sound resonance technique	AA kara UU kara MM kara AUM kara	5 each	10 mins
37	OM meditation		-	10 mins

6.3 PHASE 3: FEASIBILITY TESTING OF YBC FOR SUD

The feasibility of the module was assessed with 23 participants with an average of 27.8(±7.2) years of substance use. According to the psychiatrist's diagnosis, all participants suffered from severe SUD with a mean duration of addiction of 9.8 (±6.4) years. The participant's socio-demographic details and history of addiction (Table 9) showed that 100% of the participants

suffered from poly-substance use, and had one primary substance of abuse which was heroin (91.3%) or Synthetic Cannabis(8.7%). All the participants were yoga naïve.

IYMSUD was well received by the participants from SUD and there were no dropouts. All the participants found the module to be feasible and were satisfied with how it was conducted. None of the participants reported any adverse effects caused by the practice of the module and found the module safe and culturally appropriate.

Socio-demographic details of patients

Table 9: Demographic and baseline data details of 23 male participants in feasibility study

Age Mean(SD)	22.78 (\pm 7.25)				
Marital Status Percentage	Married- 13.04	Unmarried- 60.9%	Divorced- 17.39%	Separated-8.7%	
Duration of addiction (Years)	9.8(\pm 6.4)				
Primary Drug Use	Opioid-91.3%		Synthetic Drug 8.7%		
Polysubstance use	100%				
Blood pressure?(mean\pmSD)	Systolic	Diastolic			
	119.04 \pm 14.3	74 \pm 10			
Motivation to Seek Treat (mean\pmSD)	Identified Motivation 26.52 \pm 2.73	Introjected Motivation 17.61 \pm 3.1	External Motivation 17.26 \pm 5.2	A- Motivation 6.52 \pm 2.72	Global Motivation 40.35 \pm 11.32

Vedic Personality	Rajasik 56.52%	Tamasik 43.47%	Sattvik 0%
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Demographic Characteristics

The sample consisted of 23 male participants with a mean age of 22.78 years (SD = 7.25). Most participants were unmarried (60.9%), while 13.04% were married, 17.39% were divorced, and 8.7% were separated. The mean duration of addiction was 9.8 years (SD = 6.4), with opioid use being the primary substance in 91.3% of participants, and synthetic drugs used by 8.7%. All participants reported polysubstance use, excluding cigarettes. The mean systolic blood pressure of the participants was 119.04 with an SD of 14.3 while the diastolic blood pressure was 74 (SD=10). We assessed the groups' motivation to seek treatment. The average (SD) Identified Motivation was 26.52±2.73, Introjected Motivation 17.61±3.1, External Motivation 17.26±5.25, A-Motivation 6.52±2.72 and their Global Motivation 40.35±11.32. 56.52% of the participants were Rajas predominant, 43.47% were Tamas predominant while none were Sattva predominant. This study scored 18 out of 23 on the checklist for assessing yoga module quality, indicating the high quality of the module (Katla et. al., 2022)

Table 10: Evaluation of outcome measures

Variables - Assessment Scales	Groups	Pre-Mean ±SD	Post-Mean±SD	Mean difference ±SD	T value (Paired Sample T test)	P Value Within the groups (Paired Sample T test)	Independent Sample T Test (T Value)	Independent Sample T Test (P Value)
Body Mass Index	IYMSUD ^c	19.95±2.92	21.5±3.35	1.52±0.94	0 (Wilcoxon)	0.004*	81.50(Mann-Whitney t test)	0.36

kg/m ² (cm)					signed rank)			
	TAU ^d	27.03±5.84	27.53±6.53	0.5±2.37	0.7 (Student t test)	0.5		
Respiratory rate (cycles/min)	IYMSUD	23.14±6.6	13.5±2.84	4.83±3.4	4.9 (Student t test)	<0.001*	3.00 (Mann-Whitney t test)	<0.001*
	TAU	16.54±1.1	19.82±1.3	1.63±1.85	-2.92 (Student t test)	0.01*		
Bhramari (seconds)	IYMSUD	9.67±2.5	13.01±4.14	3.41±3.7	2.5 (Wilcoxon signed rank)	0.007*	87.00 (Mann-Whitney t test)	0.2
	TAU	14.27±7.23	14±36	0.09±7.93	-0.89 (Student t test)	0.39		
Quality of Life - WHOQOL (Bref) ^b	Global QOL - IYMSUD	2±0.74	3.83±0.58	1.83±0.72	-8.85 (Student t test)	<0.001	128.00 (Mann-Whitney t test)	<0.001*
	Global QOL - TAU	3.18±1.17	2.64±0.92	0.54±1.45	1.25 (Student t test)	0.23		
	Global Health IYMSUD	3.08±1.24	4.17±0.6	1.08±1.16	-2.5 (Wilcoxon signed rank)	0.019	0.59 (Student t test)	0.55
	Global Health TAU	2.91±1.5	3.64±0.92	0.73±1.68	6.00 (Wilcoxon signed rank)	0.19		
	Physical Health IYMSUD	70.5±16.8	80.58±13.88	10.09±16.26	4 (Wilcoxon signed rank)	0.055	63.50 (Mann-Whitney t test)	0.9
	Physical Health TAU	47.64±10.	56.64±16.13	9±15.71	9	0.12		

Health TAU	79				(Wilcoxon signed rank)			
Psychological Health IYMSUD	56.25±16.06	74.41±10.11	18.16±15.12	0	(Wilcoxon signed rank)	0.003*	81 (Mann-Whitney t test)	0.37
Psychological Health TAU	44.36±11.07	59.36±12.89	15.00±17.54	2.5	(Wilcoxon signed rank)	0.02*		
Social Health IYMSUD	66.67±23.9	74.83±12.92	8.16±21.77	21.5	(Wilcoxon signed rank)	0.32	0.7 (Student t test)	0.48
Social Health TAU	54.55±18.06	56.18±16.49	1.64±22.7	28.5	(Wilcoxon signed rank)	0.72		
Environmental Health IYMSUD	51.17±19.83	70.83±13.15	19.68±22.29	9	(Wilcoxon signed rank)	0.20	2.86 (Student t test)	0.009
Environmental Health TAU	43.18±12.56	40.81±6.94	2.36±12.97	35	(Wilcoxon signed rank)	0.47		

GIN^a - Gita Inventory^b WHO QOL BREF - World Health Organization Quality of Life Scale (Bref)^c IYMSUD - Integrated Yoga Module for SUD^d TAU - Treatment as Usual

Table 11: Showing the Yoga group participant's mean rating of the Integrated Yoga-based counselling session

Session No	1	2	3	4	5	6	7	8
Rating Mean	3.92	4.08	4.58	4.5	4.5	5	5	5

The independent t-test was done using the means of magnitude difference using Mann-Whitney U test and Student T were used to compare the intervention group (IYMSUD) and treatment-as-usual (TAU) group (Table 10). There was a statistical significant in Respiratory Rate $p < 0.001$ (IYMSUD = 4.83 ± 3.4 , TAU = 1.63 ± 1.85), in global health $p < 0.001$ (IYMSUD = 1.83 ± 0.72 , TAU = 0.54 ± 1.45) and environmental health $p < 0.009$ (IYMSUD = 19.68 ± 22.29 , TAU = 2.36 ± 12.97).

Within the groups analysis was carried out using the Student t test and Wilcoxon signed rank according to the normality. Results showed that there was statistical significant in the IYMSUD group body mass index $p = 0.004$, in respiratory rate $p < 0.001$, bhramari rate $p = 0.007$, global quality life $p < 0.001$, global health $p = 0.019$, physical health $p = 0.055$, psychological health $p = 0.003$.