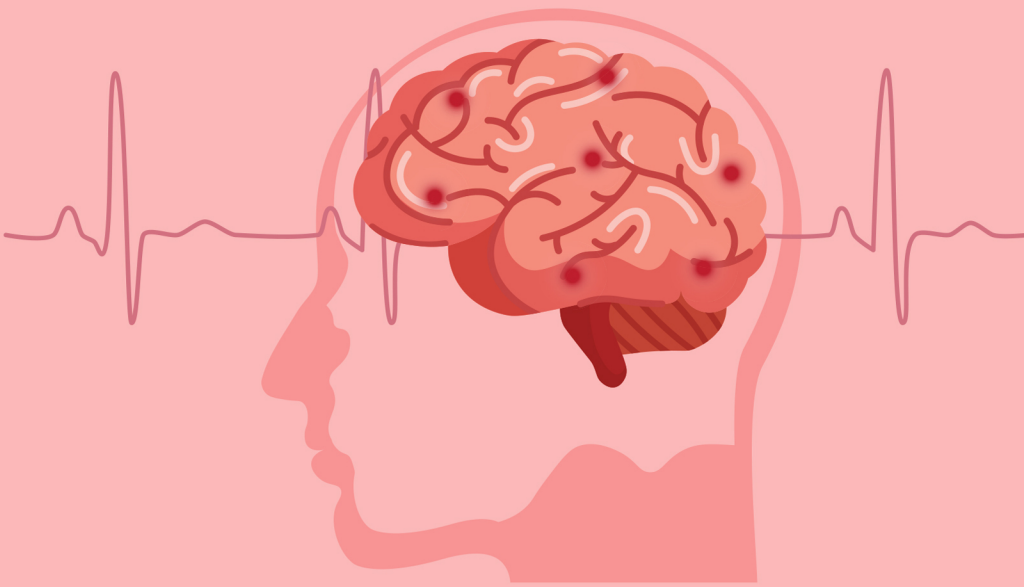
ROUTLEDGE

HEALTH PSYCHOLOGY

CONTRIBUTIONS TO THE INDIAN HEALTH SYSTEM

EDITED BY
Meena Hariharan, Meera Padhy and Usha Chivukula



HEALTH PSYCHOLOGY

This book provides a holistic understanding of the state of health psychology in the Indian context and the types of psychological and social support and welfare that are offered and required within treatment processes for various illnesses.

The book discusses why health care should be the prerogative of both the biomedical profession and health psychologists and how they work together with medical professionals to augment public health. It emphasises the shift from biomedical to biopsychosocial approach in strengthening health care outcomes. The book highlights the substantial contribution of health psychology to the Indian health care system through simple, cost-effective, indigenous, and standardised techniques that worked efficiently in the context of various diseases. It projects the emerging trends and innovative techniques in health psychology in handling challenging health care needs.

This book will be of interest to students, teachers, and researchers of psychology, psychiatry, social psychology, sociology, social work, and South Asian studies.

Meena Hariharan is a Professor and the Founder Director of the Centre for Health Psychology. She joined the University of Hyderabad in 1992. She has published extensively in the field of health psychology covering behavioural cardiology, ICU trauma, coping with non-communicable diseases, and resilience studies. She is the Founder President of the Association of Health Psychologists and the Chief Editor of *Indian Journal of Health Studies*.

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Dedicated to

Professor I. Ramabrahmam

The Inspiration Behind This Volume

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FOREWORD

'Human health' so far has largely been viewed as an issue related to improving the functions of the 'human body parts'. This area of research has been entirely dominated by the reductionist science which ushered in the branch of 'Biomedical sciences' where a human being is construed as a coordinated machine sustained by the integrated functions of various body parts, the psychological well-being of the 'human individual' being conveniently relegated to the footnotes of the discourses on human health. The reductionism-centric biomedical approach has now come under severe criticism, especially in the recent past and in the post-COVID era.

Human health is now being increasingly recognised as an area that needs to integrate the well-being of the human body with that of its mind harmoniously in a contextual manner, a realisation that calls for the active participation of health psychology as a robust ingredient contributing towards human health care. It is here that the current book, edited by Prof. Meena Hariharan, Dr. Meera Padhy, and Dr. Usha Chivukula, fills in the void elegantly, as summarised below. The diverse, but interrelated contents of various chapters in the book capture the role of health psychology in integrating biomedical care practices with methods that augment the psychological well-being of the patients. The book brings home the takeaway that the body-mind aspects are interwoven contextually, largely driven by sociocultural belief systems, within the framework of patient's awareness and resource levels.

This book largely focusses on non-communicable diseases (NCD) as a model system for uncovering various aspects of patient health psychology needs. The book makes an interesting and insightful reading on several aspects of human health care issues on how the Indian mental health ecosystem is beset with several implementational challenges. At the same time, some new hopeful scenarios are also discussed such as the processes of acculturation and learned helplessness

among patients that facilitates subjective well beingness in them. I strongly believe that the area of 'the perception of illness' needs a special mention here. This is a fascinating future area of research, especially in the Indian biopsychosocial context. Finally, it is important to emphasise the areas covered in the book related to caregiver stresses experienced in ICU settings and how the unmet needs of the patients are to be realised and addressed. All in all, the book is a treasure-trove of insightful thoughts that are succinctly presented to a general audience in a highly readable form. I commend the authors as well as the editors who have done a superb job in bringing out this book, which is the need of the hour.

Prof. BJ Rao
Vice-Chancellor
University of Hyderabad

PREFACE

Between the years 1992 and 2006, alongside my responsibilities as a faculty in the Academic Staff College, University of Hyderabad (now called Human Resource Development Centre/HRDC), I continued my endeavour to convince the University to start a department of Psychology in the University. Finally, with the commitment of Prof. S. E. Hasnain and the support of UGC, the Centre for Health Psychology was launched in the year 2007. In the year 2012, Prof. T. S. Saraswathi said that while I concentrate on building the Centre, I should also plan my publication. The Centre still taking shape, I thought my undivided attention should be on building the place by starting new courses, developing laboratories, and organising seminars. By 2014, the Centre could complete a good number of studies and publish them in good journals. It was then that Prof. I. Ramabrahmam, my good colleague, planted the seed in my mind that we should plan to bring an edited book where the contributions of health psychologists in India should be projected. His conviction about the need for such a book was so strong that he would remind me about it at every opportunity. He left for his heavenly abode on 28 July 2021. His departure created a vacuum. His words of advice that we should come with a book on health psychology kept echoing in my ears. I discussed this with my two colleagues Dr. Meera and Dr. Usha, who have significantly contributed to the development of the Centre for Health Psychology. They too felt that it would be a great tribute to our friend to bring a book on Indian contributions to the field of health psychology. This book is the outcome.

We organised the book by carefully identifying the five significant areas where research contributions are relevant to Indian sociocultural needs. The book thus is organised into five sections. Section I is on the holistic approach to health care. Though the biopsychosocial approach is emphasised, the mindset of the health care professionals appears to be stuck on the biomedical path when it comes to

implementation. The change in practice is possible with an appropriate thrust at the policy level. This can materialise with adequate evidence-based research findings supporting the need for a biopsychosocial approach to health care as a replacement for the biomedical approach. Public health measures through appropriate awareness campaigns and health literacy enhancing programmes are also the need of the hour where the participation of health psychologists is essential. A move towards holistic health will be complete by bringing about changes in health communication patterns and quality. Thus, the first section on the holistic approach to health care has taken into consideration the health policies of the country, the role of research contributions, and the communication practices that directly impact the patient. The first chapter titled 'Evidence-Based Health Care: Contributions of Health Psychology' is the lead chapter that covers a wide range of contributions from health psychology on samples ranging from paediatrics to geriatrics, encompassing Behavioural Cardiology, Behavioural Diabetology, Psycho-oncology, and other non-communicable diseases. It highlights the psychosocial interventions for chronic diseases and research contributions of health psychology in enhancing well-being of the individuals in society. This lead chapter takes an overview of the topics dealt with in the other chapters of this book. The second chapter titled 'Health Communication as a Preface to Management of Non-Communicable Diseases' delineates the importance of communication in enhancing knowledge, cognition, motivation, and health adherence behaviour so as to optimise the prognosis of non-communicable diseases. The third chapter titled 'Health and Wellbeing for All: Policy Perspectives in the Indian Context' critically analyses the health policies of the Government of India and identifies the lacunae, and suggests the steps for strengthening the health care system in the country. The fourth chapter in this section titled 'Implementation Research for Public Health and Preventive Health Care in India' discusses the multidisciplinary approach to complex health problems in the context of low- and middle-income countries. It highlights the need for translating knowledge to implementation.

Section II of the book related to the health and well-being of individuals in society has three chapters. The first chapter is titled 'Residential Crowding and Subjective Well-Being: Mediating Role of Helplessness'. It throws light on the mediating role played by the individual's helpless disposition in sustaining well-being in crowded living. This chapter assumes relevance in the context of the realities of living of middle-class and lower class populations in urban and semi-urban areas of low- and middle-income countries like India. The empirical study that the chapter enumerates was conducted in Kerala, Southern India. The second chapter in this section titled 'Health in the Culturally Changing Underdeveloped Adivasi Communities' throws light on the concept of health in a diverse country like India where the cultural health practices are unique. It refutes the concept of 'one-size-fits-all' in the context of India. The contents of this chapter make one ponder the feasibility of a national health policy in a country with cultural diversity. The third chapter in the section 'Smoking and Alcohol Consumption Among Type 2 Diabetics: Health Behaviour Model-Based

Investigation' is an empirical study based on a theoretical model. It examines the factors contributing to alcohol and tobacco consumption among patients with diabetes. These health risk behaviours, though are covered by the physician during the medical advice, tend to be received by the patients with a certain complacency. The results of the study provide an insight into the factors associated with it and help plan preventive and remedial steps to wean the individuals from these behaviours.

Section III of the book brings three chapters related to Psychosocial Factors in Cardiovascular Diseases. The three chapters in this section are: 'Psychological Necessities of Patients Electing Cardiac Bypass Surgery: A Review and Roadmap', 'Illness Perception and Adherence Behaviour in Patients with Coronary Artery Disease', and 'Optimizing Hypertension Management: Children as Adherence Monitors for Adult Patients'. The first chapter consolidates research evidence to support the need for assessment and intervention for the psychological state of the patient before and after coronary artery bypass grafting. The second chapter presents an empirical study on the way patients with coronary artery disease perceive their condition and its impact on the patient's adherence behaviour. The study, by highlighting the barriers to adherence, helps in conceptualising a foolproof intervention for enhancing adherence in patients with coronary artery diseases. The third chapter brings in innovative research that used children as health monitors for adult hypertension patients in the family after orienting them to gain adequate knowledge about hypertension. This study has a promise for cost-effective approaches to minimise the adversities arising out of non-compliance among the hypertensives and also prepare the younger generation to design a lifestyle that keeps hypertension at bay. The research design can be considered a double-edged sword that not only helps the contemporary hypertensives enhance their adherence and thereby reap a better prognosis but also take proactive preventive steps to arrest the future prevalence of the disease by training the youngsters in a healthy lifestyle.

Section IV of the book, Psychosocial Factors in Diabetes Management, presents two chapters related to Behavioural Diabetology. The first chapter titled 'Illness Perceptions and Quality of Life of Diabetic Patients: Role of Perceived Control of Internal States' is an empirical study on diabetic patients. It brings to light the impact of the patient's perceived control and self-efficacy on their quality of life. The chapter brings home the fact that the quality of life is just not impacted by the disease condition alone but also by the functional psychological aspects. This provides the logic for the biopsychosocial approach to the management of diabetes. The second chapter titled 'Illness Perceptions and Diabetes Self-Management: A Mixed Method Approach' is an empirical study. The qualitative analysis identifies the barriers that contribute to suboptimal management of the disease. Identification of barriers helps in building a preventive model to sustain adherence behaviour.

Section V of the book is Critical Care Needs and Psychological Support. Two chapters in the section with a specific focus on the experiences of Intensive

Care Units (ICUs) and the experiences of patients diagnosed with cancer constitute strong evidence for a psychosocial approach to critical care. The first chapter 'The Intensive Care Unit Experiences and Repercussions: Need for Psychosocial Care' reiterates the need for psychosocial care in ICU units in hospitals. It provides ample evidence of the environmental and system-induced stress among the patients that add to their critical physical health condition. The chapter argues for a shift from treating the disease to treating the patients in ICU by enumerating the short- and long-term adverse impacts on the cognition and emotion of the patient during and aftermath of the ICU stay. The second chapter titled 'An Interpretative Phenomenological Analysis: The Unmet Information and Supportive Care Needs of Cancer Patients' presented a thematic analysis of the cancer patients' experience of their unmet needs. The patient wishes to be apprised of the information on the disease, treatment course, impact, and prognosis.

Overall, the book covers the essentials of conceptual and clinical aspects to highlight the significance of health psychology in the field of health care by maintaining a good balance between the review articles and empirical studies. The authors of the chapters are from reputed apex academic institutions like central universities, IITs, private universities, international organisations, freelance consultants, and students in their Master's or Research Programmes. While the chapters discuss the contributions of health psychology to the Indian Health System, they also inadvertently expose the readers to a versatile approach to research in health psychology. The readers should focus on both aspects. We expect the book to be useful for the students in their Master's and Research Programmes. The researchers and academics from other nations interested in the unique contribution of the field of health psychology would benefit from this book.

Meena Hariharan

ACKNOWLEDGEMENTS

The idea originates in the mind. Between the thought and the action, there are many propellers. Between the idea of this book and seeing it in print, we had many such propellers – in the form of circumstances and situations and the in the form of well-wishers and supporters. This section of the book is an opportunity to express our gratitude to all those who constituted this support group.

Our first thoughts go to our good friend, well-wisher, and colleague Prof. I. Ramabrahmam. Though not from the discipline of Psychology, palpitating the need for a volume like this book, he kept reminding us to initiate the work. Unfortunately, he is not amidst us in his physical form, though his words of wisdom and the vision he created for us keep guiding us. Gratitude to him from the bottom of our hearts.

Our Vice-Chancellor, Prof. BJ Rao, who readily consented to write the foreword for this book, as a nurturing leader gave us that essential nudge to initiate further work in the related field with his valuable suggestions.

Many of our colleagues from the field of Psychology and other disciplines supported us in many ways. Some of our students who extended their technical support need a special mention. They are Adarsh K Varma and Vishnu V.

While mentioning those who supported us, we normally mention our families last. True, during the period of working for this book, we kept our families last in our priority. They understood extended total support and helped in many ways.

So, they were the people who played a significant role between the thought and the form of this book. Gratitude to one and all. And yes, 'Thank you' is too short an expression to communicate our real feelings.

Meena Hariharan
Meera Padhy
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PART I

Holistic Approach to Health

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1

EVIDENCE-BASED HEALTH CARE

Contributions of Health Psychology

Meena Hariharan

The definition of health care is holistic, while the popular understanding is reductionist. Health care is defined as 'efforts made to maintain or restore physical, mental, or emotional well-being especially by trained and licensed professionals' (Merriam-Webster Dictionary 2022). It refers to not only the physical but also the mental and emotional well-being. Health care is extended to the population through well-organised structures. Extending health care to organisations and people, with a primary intention to promote, restore, or maintain the health of the population, is the responsibility of the health care system in a country. The ancient health care practice in India was built on the robust pillars of biological, psychological, social, spiritual, and environmental factors contributing to an individual's well-being. The *Ayurveda* model of the ancient Indian health practice associates health with multiple causes such as biological, psychological, environmental (including physical and social environment), and spiritual aspects related to the individual's life. This holistic approach was based on the individual's constitution, personality disposition, behavioural practices, and the individual's ecological connection with the environment. Since it was tailored to an individual's unique characteristics, no clinical studies could be carried out for bringing in gross generalisations. Nevertheless, it took the path of the biopsychosocial approach to health that concentrated on the individual but not the disease or the physical organ of the person that manifested abnormality and pathology. This practice perfectly suited the sociocultural needs of the nation. However, in the 18th century, on the direction of Macaulay the practice of *Ayurveda* was replaced with allopathy medicine, with which the biopsychosocial approach got replaced with the biomedical approach. Even after attaining independence, there have not been any concerted efforts to revert to the biopsychosocial approach that suited the Indian psyche.

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For more than a decade, India has become a country for medical tourism. It can be strengthened further with a shift to a biopsychosocial approach which has been proved to be highly beneficial. Research findings in various aspects related to health care have proved the advantages of the biopsychosocial approach. There has been ample research evidence to argue for strengthening health care by taking a holistic approach. The findings related to preventive care as a public health measure, diagnostics as an approach to guide the treatment regimen, the treatment regimen itself that includes anxiety and depression management, psychoeducation influencing the health belief system, cognitive intervention for enhancing the health literacy, educating on the identification of alarm signs, inducing optimism, reducing hostility, strengthening health self-efficacy, or incentivising positive health behaviour. While assessing the health care system, the parameters normally taken into consideration are quantitative in nature, which identify the factors such as infrastructure, human resources (in terms of doctors and nurses), finances, administrative set-up, and so on. While these aspects do account for the quality of health care, the important aspect that is normally excluded is the patient well-being factor, which should take into account the psychological state of the target individual/group as part of the prognosis.

'Evidence-based medicine' is what seems to be the guiding force behind the contemporary health care practice. The term evidence-based medicine is a generic term to cover its reference to various fields of medical and paramedical disciplines such as 'evidence-based psychiatry, or evidence-based nursing'. Evidence-based health care (EBHC) refers to the use of evidence for making policy and management decisions (Bhargava & Bhargava, 2007). The term 'evidence' here refers to evidence in the form of research findings based on large, randomised samples at multinational, national, and single centre studies. When the findings of such studies are supported by the experience of experts (in practice) and the patients' need satisfaction, it is time that evidence-based health care should get into policy and large-scale implementation. In this context, discussing the contributions of research in Health Psychology assumes relevance. Based on its research findings, the discipline of Health Psychology has been advocating a biopsychosocial approach to optimise health care. The branches of Behavioural Cardiology, Behavioural Diabetology, and Psycho-Oncology gaining demand across the globe is evidence of the need for a holistic approach to patient care. Research in Health Psychology established a bidirectional relationship between psychological and physiological factors on the one hand and the symbiotic function of psychological, social, environmental, and physiological factors in determining the health and well-being of the individual and communities on the other. Thus, the contributions of Health Psychology extended not only to patient care and treatment but also to the areas of prevention and prediction of health. This is done through designing interventions like psychoeducation and public health awareness campaigns at community levels as well as need-based cognitive affective therapies and behaviour change modules at an individual level. The efficacy of these interventions has been proved across the various age groups

covering the lifespan and across the sociocultural groups covering a wide range of the population. Such preliminary evidence should pave the path for large-scale randomised studies at national and multinational levels to warrant scientific evidence.

Studies on Paediatric and Geriatric Sample

Children are not miniature adults. Being in the process of development, they are not yet equipped cognitively, emotionally, or behaviourally to face life's adversities. Timely attainment of developmental milestones to a large extent contributes to the health and well-being of the individual. The major factors that take the child through the milestones and ensure health and well-being are family structure (Block et al., 1988; Dawson, 1991), school environment, and neighbourhood. The parameters to measure children's health and well-being are physical health, emotional state, and academic performance. The individual who encounters a setback in any one of these dimensions irrespective of the age is likely to show symptoms in the other dimensions too as per the body-mind integration model (Hariharan, 2020). It may appear more pronounced in the children due to a lack of competence in applying coping mechanisms. A number of studies have established the relationship between physical health and general well-being in children.

Children (below 18 years) in India constitute 36.7% of the total population (Census of India, 2011). This constitutes a little over one-third of the total population. According to the reports of the Census Commissioner's office, 0.6% of children between the age group of 5and 14 years die every year due to various causes. The top ten causes of death for children in the age group of 5–14 years are presented in Table 1.1.

TABLE 1.1 Top ten causes of death in children in the age group of 5–14 years in India between 2010 and 2013

Rank	*Causes of death*	*Death percentage*
1	Unintentional injuries (other than motor vehicle accidents)	20.5
2	Diarrhoeal diseases	11.6
3	Other infectious and parasitic diseases	10.6
4	Malnutrition	7.7
5	Respiratory infections	6.5
6	Digestive diseases	6.4
7	Motor vehicle accidents	6.1
8	Fever of unknown origin	5.1
9	Neuropsychiatric conditions	3.7
10	Other non-communicable diseases	3.7
	All other remaining causes	18.0

Source: Census of India (2011). Table C-13. Office of the Registrar General & Census Commissioner, India, Ministry of Home Affairs, Govt. of India, New Delhi.

It can be observed from Table 1.1 that 3.7% of children die of non-communicable diseases while 28.7% die of diarrhoea and other infectious diseases. Infections are contacted by the children due to health inappropriate behaviour and lack of preventive measures. Stress causes immunosuppression in children. Further, chronic stress in childhood has been found to cause architectural and functional changes in the brain of the child (Hariharan et al., 2014; Hariharan, 2020). In view of these findings, there is a need to investigate the high death rates due to infections from this angle and contemplate intervention measures to minimise childhood stress.

Non-communicable diseases such as hypertension, diabetes, and cancer are found to be common among children. A systematic review and meta-analysis revealed that 7% of school-going children in India suffered from hypertension. Among them, a higher percentage was from an urban area and 29% of them were obese children (Meena et al., 2021). Prevalence of diabetes among the 10–19 years age group of Indian children was found to be 12.3% (pre-diabetes) and 8.4% (diabetes) (Kumar et al., 2021). As per the population-based cancer registry (PBCR), the incidence of cancer among Indian children below 15 years of age accounts for 0.7% to 4.4% of the total cancer diagnoses (National Centre for Disease Informatics and Research, 2012–2014).

In view of the increasing incidence and prevalence of non-communicable diseases among children, it is desirable that children have an adequate knowledge base about these chronic illnesses and their association with lifestyle so that preventive measures are likely to be adopted in case they have the disease, and they acquire the skills for effective management of these illnesses. A series of studies were conducted in this line by a team of researchers from the Centre for Health Psychology, University of Hyderabad in an attempt to measure the children's knowledge of causes, symptoms, timeline, treatment, and management of four non-communicable diseases. Children from the 6th to 10th/12th class constituted the sample. Results revealed a very low level of knowledge about hypertension (Hariharan et al., 2018), diabetes (Padhy et al., 2018), cancer (Kopparty et al., 2018), and HIV/AIDS (Nagpal et al., 2018). Almost all these studies, while endorsing a dismally low knowledge level, did observe a developmental trend in cognition of the concerned illness and a decrease in the misconceptions about the diseases among children. The studies recommended the inclusion of topics related to non-communicable diseases in the school curriculum. A knowledge base is very important because of the close connection between knowledge, affect, motivation, and behaviour.

Illness, particularly terminal illness, and chronic diseases induce considerable stress in the patient because of the pain, suffering, uncertainty, restrictions, and dependence that accompany the condition. Medications and invasive procedures address the physical pain, deformity, or pathology of the organ functioning. When the psychological state is left unattended, it impacts the physical healing by not responding or by the slow response. Law et al. (2019) in their meta-analysis of 44 studies on interventions for parents with children suffering

from chronic illnesses came up with encouraging findings. The study included interventions for the parents of children suffering from asthma, diabetes, cancer, chronic pain, inflammatory bowel disease, skin diseases, and traumatic brain injury. They found cognitive behaviour therapy (CBT) and problem-solving therapy to be effective. The results revealed the positive impact of interventions on parental behaviour of children with cancer, diabetes, chronic pain, and traumatic brain injury. The therapeutic intervention was found useful in post-treatment follow-up of children with cancer and chronic pain, but not the others. However, the authors endorsed the limitation of insufficient data to interpret many variables. Rohan and Verma (2020) through the four case studies on children with chronic illnesses recommend a combination of interventions such as cognitive behaviour therapy, behaviour therapy, medical coping, parent training, and motivational interviewing for optimum outcome. There are other innovative therapies used to minimise the illness trauma of children. They include pet therapy, art therapy, and play therapy, to name a few.

According to the Census Report 2011, geriatric population in India totals 103 million constituting 8.5% of the population (Singh & Misra, 2018). Characterised by degenerative diseases, the elderly are in need of greater psychosocial support than any other age group through developmental stages. Most of the age-related problems at this stage of life do not promise a permanent cure, but the well-being can be optimised by inducing the feelings of being loved, being important, and being wanted in the family and society. The elderly population constitutes the native wisdom of a nation and hence needs to be protected and treated with care. Depression, somatisation, insomnia, pains and aches, problems related to the gastrointestinal system, cognitive degeneration, and sensory function degeneration are some of the common problems. Social support intervention either by family or non-family members is found to enhance the feelings of social security, well-being, and functional competence and alleviate stress (Rao, 2001; Umadevi, 1991). Meditation helped improve intellectual functioning and mental health (Ramamurti & Jamuna, 1999). Yoga was found to be beneficial by contributing to alertness and positive affect and disseminating negative feelings, anxiety, and depression. Researchers from the West and East have proved the positive contributions of spirituality, religion, prayers, chanting, and meditation (Kakar, 2003; Newport, 2006; Yoon & Lee, 2006). Thus, there is sufficient research evidence to suggest the dire need for psychosocial interventions for the geriatric population across the globe. This need is on the increase in Indian society given the transition from joint family to nuclear family structures and the large-scale migration of the educated urban youth to other countries and the rural youth's preference for urban life in pursuit of a career.

While psychosocial interventions for paediatric and geriatric populations have to carve their niche, the health psychological interventions in the field of non-communicable diseases have advanced fast to make an argument for a paradigm shift from the biomedical to biopsychosocial path.

Psychosocial Factors in Non-Communicable Diseases

Non-communicable diseases are also known as lifestyle diseases, having a close association with the health behaviour of the individual besides the genetic and congenital factors. Given this fact, apart from the medications, the individual diagnosed with the non-communicable disease has to adopt changes in lifestyle involving sometimes drastic changes in health behaviour by minimising health-compromising behaviour and enhancing health-promoting behaviour appropriate to the diagnosis. The gist of various theories of health behaviour brings the following salient points. Behavioural change is something that has an association with cognition, affect, motivation, and the incentives that ensure the sustenance of the changed behaviour. The individual is likely to contemplate behavioural change only if the self-efficacy, control, and benefits of the change are perceived as adequate and barriers to the change are perceived as low. At the same time, the assessed threat based on the severity and susceptibility should trigger the right proportion of fear, and the perceived benefits should be viewed as incentives. The combination of the fear of the severity and susceptibility of the illness and the potential benefits of behaviour change trigger motivation to contemplate behaviour change in the prescribed lines of lifestyle modifications. Further, for the intent of behaviour change to take a shape, one's attitudes towards the change, approval of significant others to the intended change, and the magnitude of disapproval for the existing health-compromising behaviour also contribute. What contributes to the beliefs is the information, awareness, and communication about the illness. Thus, broadly, what the theories of health behaviour suggest is that the change in health behaviour can be initiated through building a new cognitive base or replacing the existing one with facts put forth candidly to drive the seriousness and the individual's stakes, enhance the self-efficacy related to the initiation and sustenance of the behavioural change, help the person identify the benefits and barriers associated with changed behaviour along with a realistic assessment of the degree of control over them, and influence the person through the significant others. All the above can constitute the ingredients of interventions planned for enhancing health-optimising behaviour. Only when this forms a part of the treatment option can one optimise the prognosis. Health Psychology research on non-communicable diseases is adequate to prove the efficacy of psychosocial interventions.

Psychosocial Factors Associated with Cardiovascular Diseases (CVD)

The basis for the association between psychological factors and cardiovascular health is the physiological response to the individual's affect state. The physiological response to stress is marked by hypothalamic pituitary axis (HPA) response and sympathetic nervous system (SNS) activation, both of which result in accelerated cardiovascular activity, which, if prolonged, casts a burden on the cardiac muscle and cardiovascular system.

The close connection between the neurophysiological and cardiovascular systems runs parallel to the cardiovascular health and the psychological state of the individual. One of the factors related to the aetiology of cardiovascular diseases is traced to type A (Friedman, 1974) and type D personalities (Pedersen & Denollet, 2006). Studies have identified anger and hostility as the major affect factors related to cardiovascular diseases (CVD). Everson-Rose and Lewis (2005) investigated the association between psychosocial factors and cardiovascular diseases. They found that cardiovascular diseases have a significant relationship with psychological factors such as depression, anger, hostility and acute or chronic psychosocial stress and social factors such as social support and social conflict. The relationship between the affect state like depression and CVD has been confirmed both by research and clinical practice (Mulle & Vaccarino, 2013). The editorial in the Journal of American Heart Association by Peterson (2020) made an observation on the close association between psychosocial factors and health in general and cardiac health in particular. Psychological factors such as stress, depression, and anxiety and social factors such as socio-economic status and adversity were the identified factors. Santosa et al. (2021) conducted an 18-year longitudinal study on participants between the age group of 35–70 years old from 21 low-, middle-, and high-income countries spread over five continents to investigate the relationship between cardiovascular risks and psychosocial factors. The findings indicated a positive association. High levels of perceived stress were found to be associated with cardiovascular diseases, coronary heart diseases (CHD), strokes, and mortality. Thus, there are adequate studies that established the relationship between psychosocial factors and cardiac health. Based on these findings, treatment, care, and preventive interventions for cardiac health should include psychosocial aspects. The inclusion of psychosocial interventions changes the approach from 'treatment' to 'healing', where the focus on psychological factors supplements the biomedical treatment. Studies in these lines have shown encouraging results. Research on Indian samples has contributed immensely to the field of Behavioural Cardiology in particular and cardiac care in general. Some of these studies are briefly discussed below.

CVD and CHD are labelled lifestyle diseases. Hypertension is one of the conditions which if not managed effectively can lead to adversities, some of which may be irreversible. Ragupathy et al. (2014) presented significant statistics related to hypertension in India. They found that 33% of urban and 25% of rural Indians above 18 years suffer from hypertension. Not all of them are aware of their hypertension condition. Only 42% of urban and 25% of rural Indians are aware of their hypertension status. What is more alarming is that only 38% of urban and 25% of rural Indian hypertensive patients undergo treatment for the condition. These findings suggest that there is ample scope for work to be initiated by researchers and practitioners from the field of Behavioural Cardiology. Awareness and knowledge constitute the basis for cognition, motivation, and lifestyle (behavioural) change. The treating doctor has a major role in creating awareness about the disease. Hence, the quality of communication between the doctor and the

patient is considered to contribute significantly to the patient's understanding of the role of self-management of the disease. Swain et al. (2015) studied the impact of quality of communication between doctors and their hypertensive patients. A total of 30 doctors and 300 hypertensive patients constituted the sample. The quality of communication that included the content communicated by the doctors and the comprehension of the same by the patients was measured using the similarity index. The blood pressure (BP) readings were taken at the baseline and after six weeks. In addition, the patients' clinical adherence was measured. Results revealed that the patients who had a high quality of communication with their doctors showed enhanced adherence with regard to medication, diet, and self-monitoring and significantly differed from those who had low quality of communication. Further, the patients with high quality of communication showed a significant drop in the systolic and diastolic measures of blood pressure as shown in the six-week follow-up. The pathway was traced from quality of communication to the effective management of BP readings through adherence behaviour. This indicated that when the patients have adequate information about the condition in a simple, comprehensible language, they tend to comply with the medical advice in letter and spirit culminating in good hypertension management. Another study (Thomas et al., 2014) that investigated the level of patient comprehension of doctor's communication found that less than 5% of patients understood the jargon used by cardiologists in their communication. The time cardiologists give their patients ranged from 2 to 22 minutes as per an unpublished study by the author reported in a newspaper article. This may happen because of the paucity of time for the doctor. It is time that the medical jargon of 'cardiac treatment' is replaced with 'comprehensive cardiac rehabilitation programme' and 'comprehensive intervention for cardiac disease prevention'.

In an attempt to study the differential impact of form and frequency of exposure to hypertension knowledge on patients diagnosed with hypertension, Andrew (2019) used group intervention on 256 participants divided into five groups. The first group was exposed to face-to-face knowledge intervention about hypertension by a qualified physician twice with a gap of two weeks. The second group also received the same intervention, but only once. The third group received the same knowledge intervention by the same physician but through video clipping which was played twice with a gap of two weeks. The fourth group received the intervention through video clipping but only once. The fifth group was a controlled group that received only standard medical care which was common as primary treatment for all the groups. All the participants were administered a number of psychological tests such as self-efficacy, perceived social support, and adherence behaviour. In addition, the BP levels were recorded for all prior to the exposure to the intervention. A six-week follow-up and post-test revealed that the four intervention groups significantly scored high on knowledge and adherence levels and scored low on the BP readings. This indicated that the knowledge intervention had a positive impact on the adherence behaviour. The group that received two face-to-face interventions reaped the optimum benefit,

followed by the one that received a single face-to-face intervention and a single video intervention. The group that received repeated video interventions ranked fourth in terms of benefits and was more comparable with the control group. This indicated that direct interaction with the expert for the transfer of knowledge is highly beneficial in group interventions. The path analysis identified the benefit of knowledge intervention influencing the self-efficacy, which influenced adherence behaviour that finally culminated in the outcome benefit in terms of declined BP readings. In addition, self-efficacy also directly contributed to prognosis. The findings indicated that knowledge interventions in groups of hypertensives helped in creating a cognitive base that enhanced the confidence in the patients to manage their hypertension through behavioural changes and finally resulted in bringing down the BP levels.

The high prevalence and asymptomatic nature of hypertension may not have the potential to invoke negative emotions on being diagnosed with the condition, but the other cardiac conditions calling for invasive procedures may cause psychological distress to the patients. There should be a way to manage the distress through interventions. However, in view of the proven role it plays in adherence and prognosis, it is imperative to design alternative approaches to knowledge enhancement among hypertensive patients.

Savio and Hariharan (2020) studied the impact of the cognitive and affective intervention on the prognosis of patients who underwent coronary artery bypass surgery (CABG). The study developed an indigenous intervention package called Programme for Affective and Cognitive Education (PACE). The study compared the impact of this indigenous intervention with that of the standardised relaxation therapy called Guided Imagery. The sample consisted of 300 patients going for elective cardiac bypass surgery, divided into three groups. The first group received PACE intervention. The second group received Guided Imagery and the third was a controlled group. All the groups were administered a series of psychological tests prior to the surgery. They were exposed to the 30 minutes intervention session a day prior to the surgery and a repeated exposure the day before their discharge from the hospital. The audio/video CDs of the intervention modules were handed over to the patients to be used as and when needed after their discharge from the hospital. They were administered the tests to measure anxiety and depression the day before the surgery and a day before the discharge and at the time of the review visit after a month. Results indicated a significant positive impact of both interventions on prognosis compared to the control group. PACE group had the highest impact. The interventions were found to reduce the psychological distress, which in turn positively contributed to prognosis. Guided Imagery is an intervention that administered relaxation to the patients. PACE intervention is aimed at enhancing the patients' cognition simultaneously with addressing the negative affect of fear and apprehension about the surgery through knowledge intervention. Thus, the intervention that reduced distress through enhancing knowledge was found to be most effective. The patients in this group were ready to resume normal routine several weeks

earlier than the other groups. There are a number of studies that proved that anxiety and depression caused a delay in recovery from surgical wounds (Bosch et al., 2007; Cole-King & Harding, 2001; Doering et al., 2005). This study in a way confirmed the findings in these lines because the patients in the PACE group were ready for normal routine and obviously recovered from surgical wounds earlier because the intervention could reduce their anxiety and depression.

Indian society being affiliation oriented, the natural social support is a strong built-in intervention for patients undergoing a cardiac procedure. It is unfortunate that the Indian health care system is not making attempts to integrate into the healing process to hasten the recovery. Chivukula et al. (2013) studied the modifier role of perceived social support on anxiety and depression in patients undergoing cardiac procedures. The results found that patients with high social support and awaiting CABG experienced lower anxiety and depression compared to those awaiting the angiogram procedure. CABG is considered major surgery with longer hospitalisation requirements and higher risk while angiogram is a relatively simple invasive diagnostic procedure requiring only a day care facility in the hospital. Yet, the patients of CABG experienced lower anxiety because of high perceived support compared to the group awaiting angiogram. This lower anxiety is advantageous for a faster pace of recovery.

Anxiety and depression were found to be comorbid conditions in a large percentage of cardiac patients. However, they remain unnoticed, undiagnosed, and untreated almost in all cases (Hariharan et al., 2014). These psychological states are not congenial for adherence behaviour. Hence, when the treatment regimen confines cardiac rehabilitation alone, ignoring the psychological state, the outcome is likely to be suboptimal. Psychological assessments and interventions are desirable inclusions in the treatment approach to cardiac problems in view of the long-established mind-body coordination. Wells et al. (2021) in a study on 332 cardiac patients attempted to combine psychological intervention alongside cardiac intervention with an objective to bring down the anxiety and depression in patients. The participants were divided into two groups. One group received Meta Cognition Therapy (MCT) alongside cardiac rehabilitation while the other group received only cardiac rehabilitation. After exposure to six sessions, the group that received MCT showed a significant reduction in depression, anxiety, and metacognitive beliefs with negative thoughts compared to the one that received only cardiac rehabilitation. This impact was found to have been sustained for 12 months. Psychological interventions are of use as an integral part of treatment or constitute a part of preventive measures through stress management programmes.

Psychosocial Factors in Diabetes

According to the International Diabetes Federation (Sun et al., 2021), more than 74 million Indians have diabetes, which is the second largest number (China has 141 million diabetics). Age-adjusted comparative prevalence of diabetes as of

2021 is reported to be 9.6%. This is expected to rise to 10.8% by the year 2045. Diabetes is classified as a lifestyle disease that demands changes in health behaviour. As discussed in the context of cardiovascular diseases, a strong cognitive base helps in bringing in behaviour change to suit the diabetic lifestyle. A study by Sandhu et al. (2015) revealed that only 23.8% of those diagnosed with the disease had good knowledge about the condition while 19.2% manifested poor knowledge. This suggests public health measures through effective campaigns to enhance awareness.

Research findings have confirmed the association between diabetes and stress (Jiang et al., 2008; Kelly & Ismail, 2015). Stressful situations in life are inevitable and are almost constantly present in an individual's life with some wide variations in degrees at different points in life. The individual who manages life stress well is the one who contributes to the effective management of any chronic illness, including diabetes.

Change in diet, maintenance of body weight and glycaemic levels, and maintenance of emotional equilibrium are aspects that call for cultivating certain habits and discipline in lifestyle. To bring this change in the behaviour, there is a need for certain psychological interventions to enhance awareness and induce motivation to initiate changes in lifestyle.

Illness cognition (Leventhal et al., 2012) and symptom perception (Broadbent, 2010) were found to have an impact on an individual's health behaviour. When the symptoms are extreme, they are perceived accurately and the health behaviour accordingly changes to compliance. Perceptions and beliefs about health are also influenced by the individual's personality. Chelli et al. (2017) in their study of Type 2 diabetes patients found that health hardiness explained significant variance in illness perception among the participants. Health hardiness measures the individual's ability to adapt to the real or potential health problem by use of control, commitment, and challenge. The involvement of the patients in disease management plays a crucial role in determining the prognosis. The patients who have an understanding of the significance of their participation in disease management and have the confidence in their ability to effectively control their diabetic conditions are likely to show a better prognosis. Lalnuntluangi et al. (2017) found that self-efficacy played a significant role in diabetes management in patients. Patients who had high self-efficacy were also found to show higher levels of well-being (Padhy et al., 2017). The patients if trained in the skill of self-management in addition to just knowledge intervention may show effective outcomes. Abraham et al. (2020) trained Type 2 diabetes patients in self-management skills and found a positive impact of it on HbA_{1c} levels, diabetes quality of life, diet, exercise care, medication, glucose testing, belief in treatment effectiveness, understanding of the disease, anxiety, and depression.

Harvey (2015) reported the effectiveness of motivational interviewing in improved self-efficacy, quality of life and reduced HbA1c, among Type 1 diabetes patients. Among Type 2 diabetes patients an improvement was observed in adherence, weight loss, diet, exercise, family support, and HbA1c. Cognitive

behaviour therapy (CBT) was found to be an effective intervention in improving the self-monitoring behaviour of blood glucose level and well-being and lowering the stress, anxiety, and depression in Type 2 diabetes patients. Their HbA_{1c} levels also showed improvement (Amsberg et al., 2009).

Diabetes management requires resolve and restraint in the patients to adhere to diet and exercise regimens. In a family set-up where the other non-diabetic members follow a normal routine and diet menu, adherence and its sustenance are possible with family support. Many a time, though the family is inclined to extend the support, they may not know how to go about it. Family support can bring effective outcomes with some intervention in the form of family counselling and therapy. Family interventions have been found to improve family relationships as well as blood sugar levels (Wysocki et al., 2008).

There is a need for more studies on the Indian sample because given the nature of the prescribed lifestyle for diabetes, and the dynamics of cultural requirements in India, the interventions and the approach to handling the patient may have to be different from that of Western countries.

Psychosocial Factors in Other Common Non-Communicable Diseases

Few other common non-communicable diseases associated with psychological and social factors are diseases such as arthritis, an autoimmune disease, asthma associated with the respiratory system, and renal disorders. A brief discussion on these diseases will strengthen the mind-body association.

Arthritis: Arthritis is a disease associated with inflammation of joints in the body with the symptoms of pain, redness, stiffness, heat in the location, fever, weight loss, breathing trouble, rash, or itching. It interferes with physical movements and hence the activities of the patient. There are several types of arthritis. The symptoms and treatment vary depending upon the type. Though it is normally known as a disease affecting the elderly, people of all ages are prone to it.

Rheumatoid arthritis is a type caused by the faulty reactions of the body's immune system. In this case, the body's immune system attacks the healthy cells in the lining of the joints causing inflammation, pain, and other symptoms. Though the causes of the disease are not yet conclusively proved, the research inputs suggest that a combination of genetic predisposition, hormonal factors, and triggering environmental factors such as smoking, infection, or encountering severe stress have their contributions. Stress is one of the factors contributing to the cause, and symptom aggravation opens a wide scope for psychosocial research in the field.

Harris et al. (2012) conducted a longitudinal study on a sample of 10,509 Australian women of the 1946–1951 cohort. The results revealed a number of psychosocial factors associated with the disease. Women reporting moderate to high stress levels showed a 2.5 times increase in the diagnosis of arthritis. Interpersonal conflict and illness in the family or close friends showed 1.4-fold increase in the presence of arthritis problems. Besides this, optimism and

perceived social support were found to have been significantly reduced in the women reporting arthritis. Further analysis revealed that anxiety was the only psychological factor associated with the disease. The patient will have to live with the pain, stiffness, and limitations in mobility. This contributes to compromising the quality of life and psychosocial well-being (Tsai et al., 2003). Patients with higher levels of pain were found to have higher levels of psychological distress, reported higher unemployment, and had lower self-efficacy (James et al., 2005). Briani et al. (2018) based on the meta-analyses of the review articles concluded that cognitive behaviour therapy with or without combination with physical exercise had no significant effect in positively influencing depression, distress, or self-efficacy. Sharpe (2016) stated that cognitive behaviour therapy at the early stages is effective in pain management while mindfulness meditation is effective in handling depression in rheumatoid arthritis patients. Chavare and Natu (2020) conducted a qualitative study on a sample of eight Indian patients with arthritis to understand the resilience process in the management of the disease. The thematic analysis identified seven aspects contributing to their resilience leading to health outcomes. They referred to an internal locus of control, optimism, inventing pragmatic practices for pain management, engaging oneself in meaningful activities, seeking social support, accepting of buffering effect of pain, and leaning on spiritual support. They suggested a biopsychosocial approach to pain management for optimising the prognosis.

Asthma: This is a condition related to the respiratory system marked by attacks of spasms in the bronchi of the lungs leading to breathing difficulties in the patient. Of the many causes, allergic reactions and hypersensitivity are the major ones. A total of 300 million people across the globe suffer from asthma. Of this, 6% of children and 2% of adults are Indians.

Psychosocial causes are found to be closely associated with asthma. In a European population-based study by Wainwright et al. (2007), on a sample of 20,888, a total of 8.1% reported a diagnosis of asthma. The results showed a significant association of asthma with psychosocial factors. After adjusting for demographic factors like age, gender, and social class, health-related factors like myocardial infarction, diabetes, and cancer, and health risks behaviours like smoking, the psychosocial factors that showed a strong association with asthma were depression, adversities in childhood, life event-related stress in adulthood, negative aspects of support of confidant, and prolonged stress during adulthood. Rajhans et al. (2021) found that children and adolescents with asthma had psychiatric conditions as comorbidities and behavioural problems too.

Apart from psychological factors, asthma is also found to be associated with a number of social variables. Rashmi et al. (2021) came up with significant findings based on the data of the 75th round of the National Survey Sample (NSS) collected in the year 2017-18. The survey was on a sample of 555,289 Indians. Analysis of the data revealed that demographic factors such as age, gender, and residential location and factors such as the type of fuel used for cooking, drinking water source, size of the house, and facilities for garbage disposal showed

significant association with asthma in the Indian population. People from high socio-economic status and those in the age group of 45–65 years were found to have higher vulnerability.

Van Lieshout and MacQueen (2008) portrayed a relatively complex relationship between asthma and depression. They argued that asthma and depression share a number of risk factors. They also showed similar patterns of dysregulation in major biological systems such as cytokines, neuroendocrine stress response, and neuropeptides. Costa et al. (2015) based on their review study suggested that there is no scientific evidence on the connection between asthma and psychological factors such as subjective perception, alexithymia, coping style, depression, and anxiety. Based on this evidence and the assumption that the relationship between the asthma and the psychological state could be bidirectional, the authors feel that it is about time that the treatment plan for asthma should include targeting the psychological states.

Renal diseases: Renal diseases are marked by problems in kidney functioning. When kidney functioning gets disrupted, there is a problem in separating the toxins from the blood and expulsion of the same from the body. Certain problems associated with renal functioning are treated and cured while some others are chronic and some may be fatal.

Chronic kidney disease (CKD) refers to long-standing kidney disease leading to failure of kidney functioning. Failure of kidney functioning leads to the accumulation of toxic matter and water retention in the body associated with a number of complications. Since the expulsion of waste matter and water is a continuous process, the failure necessitates an artificially induced function of this activity involving rigorous monitoring and treatment that interferes with the normal routine and effective living in the patients. It is but natural that disruption of normal activities, loss of autonomy, and dependence on others have psychosocial repercussions. CKD is found to be closely associated with high stress levels and depressive disorders. Ahlawat et al. (2018) identified a number of psychosocial factors contributing to depression in CKD patients. They are the age and gender of patients, body mass index, availability of funding for treatment, education, income, duration of the disease, comorbid conditions, and the need for haemodialysis. Persistent fatigue, restrictions in activities and diet, and rigorous treatment regimens associated with CKD induce psychological distress in the patients (Tong et al., 2009). This in turn activates the HPA axis which is associated with enhanced stress levels. According to the meta-analysis of Palmer et al. (2013), the lifetime prevalence of depression among CKD stage 5D patients is 22.8% as against 10.8% in the general population. Khan et al. (2019) opined that patients of CKD have a depressive burden hidden behind the poor quality of life irrespective of whether the treatment regimen involves dialysis or medical management. Depression in CKD patients is the consequence of illness burden, lowered quality of life, social support deficit, abnormality in hormonal secretion changes in autonomic activities, and comorbid conditions (Shirazian, 2018). Muthukumaran et al. (2021) in their study of haemodialysis patients found that

depression was associated with lower educational level, high pill burden, low quality of life, and perception of a burden on the caregiver. The above findings clearly suggest that it is desirable to include professional psychologists in the team of nephrologists treating the patients.

Psychosocial Interventions for Cancer

Unlike cardiovascular diseases and diabetes, cancer cannot be described with a common group of symptoms. The symptoms, treatment, and prognosis vary with the location, grade, and stage of the disease. However, the common physical characteristics are fatigue, weight loss, appetite loss, and pain. Psychological characteristics are anxiety, depression, apprehension, fear of death, hopelessness, helplessness, anger, and guilt, to name a few. The advancement in treatment and the ageing population are two factors responsible for increasing incidence and a large number of cancer survivors needing interventions for optimising quality of life. Given its characteristic of aggressive treatment, moderate to poor prognosis, the severity of pain, lowered quality of life, and late diagnosis and palliation, the disease of cancer is associated with deep emotions not only for the patient but also for the family and the loved ones. There are research findings indicating the outcome effectiveness of medical treatment on patients with lower levels of anxiety and depression (Papakostas et al., 2008). In view of this, psychological interventions for cancer patients gain importance. The objectives of psychosocial interventions for cancer patients are to help the patients adapt to the disease and the treatment as well as optimise their state of well-being. A high stress level in the patient and the family is normally the common denominator. The first important step of psychosocial intervention is to address and aim at minimising stress levels. The common approach has been the application of psychoeducation, cognitive behaviour therapy, and building social support for the patient (Ranchor et al., 2017). Endorsing the significance of it, the International Psycho-Oncology Society and WHO have been working on integrating psychological interventions for patients and their families into cancer care across the globe (Alexander & Murthy, 2020). Anxiety and depression are the common affect states of the patients with cancer. Management of depression through appropriate interventions was found to be effective in improving the quality of life among patients (Sharpe et al., 2014). Agarwal and Maroko-Afek (2018) discussed the use of Yoga as a therapeutic intervention for cancer.

For optimising the care of cancer patients, caregiver health care constitutes an important factor. Considering the intensity duration and emergencies involved in cancer care, the primary caregiver often endures what is called the 'caregiver burden' characterised by extreme fatigue, depression, anxiety, exhaustion, and stress. This adversely impacts the quality of caregiving. In the interest of the patient, there is a need to sustain the quality of care. For this reason, appropriate interventions are designed for the caregiver with the objective of minimising the caregiver's burden.

Kedia et al. (2020) conducted a systematic review of literature on studies related to interventions for informal caregivers of lung cancer patients. They identified four categories of interventions, that is, communication-based interventions, interventions aimed at stress reduction, for enhancing coping skills, and multicomponent interventions. They found that most of the interventions and specifically communication-based and multicomponent interventions proved effective in reducing caregiver burden and negative affects such as anxiety, depression, and distress and could enhance the self-efficacy, quality of life, and coping skills of caregivers. Zhang et al. (2020) found that psychosocial interventions could significantly reduce anxiety and depression but not general distress in caregivers of cancer patients. Psychosocial interventions may vary with the needs of the caregiver. Various intervention models that include cognitive behaviour therapy, emotion-focused intervention, existential behaviour therapy, Comprehensive Health Enhancement Support System (CHESS), and problem-solving therapy are a few tested methods. A systematic review on this found that interventions that had the patient-caregiver dyad with an objective of enhancing the interpersonal connection between them, self-care, and symptom management of patients helped in reducing the caregiver depression and quality of life, and music therapy helped in alleviating the anxiety in caregivers (Fu et al., 2017).

A wide range of interventions targeting cognition, affect, and behaviour have been used on patients of great diversities. They included the standard CBT, behavioural interventions, relaxation, music therapy, play therapy, and so on. The common conclusion different authors arrived at was to increase the trials on Indian patients and caregivers and evolve modules based on randomised control trials (Lee et al., 2021; Peddireddy, 2019; Satapathy et al., 2018).

Enhancing Health and Well-Being for Individuals and Society

Health care is not limited to clinical settings. It includes the well-being of the individual in society. American Psychological Association in its dictionary defines well-being as 'a state of happiness and contentment, with low levels of distress, overall good physical and mental health and outlook, or good quality of life'. Ensuring and sustaining this in the common citizen of any country depends on the economic, social, and spiritual environment backed by a strong political will. Discussion on that is beyond the scope of this chapter. However, a brief discussion on community health is within the purview of Health Psychology. Major aspects of community health include the following:

- Identification of public health concerns typical to certain geographic areas, which may even cover social and environmental factors related to a healthy life
- Identification of resource gaps in community health services
- Identification of resources within the community to be utilised in health services

- Community Health Education and counselling to optimise a healthy lifestyle
- Advocating for improved care for the population at risk

The points mentioned above are in addition to the basic health care provisions in the community. Research inputs in these aspects are multidisciplinary, with the involvement of Public Health, Health Psychology, Social Work, Clinical Psychology, Nursing Science, and so on. There is a dire need for research in the field of Community Health Psychology in the Indian context. However, since the discipline of Health Psychology is still in its infancy in the country, the specialised branch of Community Health Psychology is yet to take off. But it is about time that the researchers in the field of Health Psychology focus on community health, which is a contemporary need. Sporadic studies in this area deserve attention, dissemination, and encouragement.

Evidence-based medicine is a systematic spiral process. It involves steps such as posing the question and exploring and investigating an answer which constitutes the evidence. It is not sufficient to gather single evidence or pieces of evidence in a specific context. The power of the evidence calls for an appropriate assessment in terms of multi-centre randomised control trials. Even though such trials establish the evidence, the acceptance of identified practice depends on its matching with the target population's values and preferences. However, such a rigorous process necessary for clinical trials of medicines and devices may not be needed in the case of Health Psychology interventions. Study results based on robust research designs, quasi-experiments, and control group trials on an acceptable sample size with scope for replication can be considered strong evidence.

Contributions of Health Psychology to the field of health care have now stood the test of scientific evidence. Large control group studies on large samples consisting of all age ranges, covering paediatric to geriatric health, and covering all fields ranging from cardiovascular health to cancer research have provided sufficient evidence on the bidirectional relationship between the psychological states and physical health status and the effectiveness of the psychosocial interventions in healing the chronic diseases, acute diseases, recovery from surgical procedures, and softening the trauma in terminal illnesses. Hence, the established intervention models that have passed the test of 'evidence-based treatment model' need to be widely disseminated, matched with user values, and integrated into the regular treatment protocols. This is possible with radical changes in national health policies emphasising a holistic approach to diagnosis, care treatment, and rehabilitation that has wellness as the focus.

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