

“COMPARATIVE STUDY OF MENTAL HEALTH BETWEEN  
DIABETIC AND BLOOD PRESSURE PATIENTS OF  
S.R.T.M UNIVERSITY NANDED”



DEPARTMENT OF PHYSICAL EDUCATION

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# Dedication

*Dedicated to my parents*

**Mr. Gh MOHI-UD-DIN DAR**

**Mrs.TAJA BEGUM**

*who fueled by*

*curiosity and foresight, like a blazing  
flame spending its light.*

*Who instilled me the sacredness of duty.*

*Who guided my first foot steps.*

*Who opened my eyes to good opportunities.*

*A million thanks for what I am today.*

*To my loving parents and **my dear sisters**  
**and dear brothers.***

# CERTIFICATE

*This is to certify that the Entitled “**Comparative Study of Mental Health Between Diabetic and Blood Pressure Patients of S.R.T.M University Nanded**” is an original bonafide work of research, carried out by **Aijaz Ahmad Dar** at School of Educational Sciences under my guidance and that it has not been previously submitted for the award of any degree or diploma and is being submitted to the **Sawami Ramanand Teerth Marathwada University Nanded Visnupuri**, in partial fulfilment of the regulations for the award of **Master of Philosophy**, examination to be held in March/April 2014. This study is carried out under my direct supervision and guidance in the department of physical education. I have great pleasure in forwarding for submission.*

**Dated; March-April 2015**

**Supervisor**

**Dr. H.A MANE**

# DECLARATION

I hereby declare that “Comparative Study Of Mental Health Between Diabetic and Blood Pressure Patients Of S.R.T.M University Nanded” this has been prepared by me under the able guidance and supervision of **Dr. H.A Mane** professor in department of physical education S.R.T.M University Nanded, as a part of my master of philosophy study in partial fulfilment of the regulations of the **Sawami Ramanand Teerth Marthwada University, Nanded**, for the award of degree master of philosophy in physical education.

This has not formed for the award of degree or diploma to me previously from any university. The **Swami Ramanand teerth Marathwada University** shall have the rights to preserve, use and disminate this dissertation / thesis in print or electronic formate for academic research purpose.

*Dated; March –April 2015*

*Mr. Aijaz Ahmad Dar*

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Research scholar

Dated; March/ April 2015

Mr. Aijaz Ahmad Dar

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# Appendix -1

## List of diabetic patients

s.no	name	Somatic symptoms	Anxiety	Social dys-function	Depression
1	S.N HAMBARDE	12	8	11	9
2	ANSARIE ANEES	9	13	9	10
3	SYED MUBASHIR	13	9	9	13
4	MATE VAIBHAV	10	12	8	12
5	D.M MUPADE	11	12	9	11
6	MUNDEES P	12	12	9	13
7	SHUTAMB LONGHAKAR	9	9	10	9
8	KACHAV PRATAP	12	13	12	8
9	SANKET NAILAMWAR	12	14	12	9
10	ABDUL HAMEED	11	9	10	13
11	SYED BABAR	10	8	9	12
12	SHINDHE VINODE	8	7	8	12
13	MANGESH SOBAK	9	5	9	12
14	SACHIN KAMBLE	9	5	10	9
15	GUMLE LAXIMAT	13	9	11	8
16	ROHIT WAGMARE	14	13	13	8
17	CHETAN RENGE	13	12	12	9
18	KIRAN KHANDRE	12	12	9	13
19	GANESH NIRGODHE	11	12	8	12
20	YOGESH BATULE	10	12	12	11
21	M.S GODBOLE	13	9	13	11
22	VIJAY KIRAN NARWADE	12	8	12	9
23	PRAMOUD SHRISHANT	9	5	8	13
24	AVINASH PAIKRAO	8	4	9	12
25	GOND PADMAHAKAR	7	5	9	13
26	DEEPAK GAWALI	7	13	11	12
27	ASHISH TIKULE	9	12	12	11
28	SWAPNIL PANDALWAR	11	9	13	9
29	SACHIN NAGRE	14	8	12	8
30	PATIL SURAJ	13	13	12	5
31	SOLANKHI YOGESH	12	12	9	5
32	PAWAR SUHAS LAXMAN	9	9	12	7
33	SHAIKH SADAAM	11	8	9	5
34	JAMEEL SHAH	14	8	9	12
35	PRAFFUL NITINKAR	13	8	13	16
36	KUNEL FULEKAR	12	9	12	12
37	CHETAN JADHAV	11	13	11	13
38	NIKHIL LANGADE	11	13	12	8
39	AMIT JADHAR	9	12	9	9
40	venu kumar	8	9	9	6

41	NIKHIL KAKAD	9	9	8	8
42	MANGESH PADOLE	13	13	7	9
43	HALGE DEVI	14	13	9	11
44	GOTRATHKAR CHANDAN	15	12	7	13
45	K. RAMCHANDURA	13	9	13	13
46	KAILASH SOTAKKE	12	8	12	12
47	CHANDER S. INGOLE	9	11	9	13
48	YOGESH NIRMAND	8	13	12	11
49	CHANDERSHAIKHAR K.	8	12	13	12
50	VINOD PATTAKAR	9	11	12	12

## Appendix 2

### List of blood pressure patients

s.no	name	Somatic symptoms	Anxiety	Social dysfunction	Depression
1	CHETAN TANU	9	13	8	11
2	PATHAN P.M	11	12	14	13
3	PANCHAL INDRA KUMAR	14	12	13	12
4	MANE SHUSHIL	8	12	9	9
5	WAMAN AMBURE	12	9	15	12
6	SHANKAR WAGMARE	10	14	14	12
7	KAPIL SHOWALE	14	15	13	14
8	DATTA TIPPAY	13	13	12	13
9	PATIL SAWANT	10	9	9	11
10	PATIL LAXMAN	9	11	9	9
11	NAIK SHRIKANT	9	16	10	7
12	KAPIL SOLANKI	8	13	12	7
13	KIRAN MARUTI	12	16	7	5
14	SUDHAKAR DULHATTE	13	12	7	5
15	SACHIN MANGHARE	9	13	9	9
16	PURSHUTUE KALLE	11	9	6	11
17	SAWAPHIL PANGWAR	16	11	9	12
18	NARWADE SANDESH	12	11	8	11
19	GADGHAE AVINASH	13	8	10	9
20	JUNAID KHAN	15	9	13	12
21	SADDAM SHAIKH	11	8	12	12
22	PATTHAN IMRAN	11	12	8	14
23	MD. MUJAHID	10	12	8	13
24	JADHAN AKASH	10	11	7	12
25	SHINDHE RAM	10	14	9	11
26	JAGTAP J.S	8	13	11	8
27	CHARLEWAR P.S	12	13	14	09
28	SHINDHE D.A	13	15	11	9
29	PATIL VIJAY	9	11	9	13
30	PATIL KAILASH	11	9	12	12
31	GORATHAKAR C.K	14	13	14	11
32	AHMAD ABDULLAH	9	12	11	12
33	YEHYA AHMAD	8	10	10	11
34	MUBARAK ALI	12	9	12	9
35	MOHD ABDULLAH	12	9	9	13
36	ABDU ABDULLAHMOHD AKEEL	14	12	8	12
37	FARAS HIZAN	13	13	8	11
38	BASL SALAH	13	13	8	11
39	MUJAHID ILYAAS	9	11	8	9
40	MOHD EESA	10	14	12	12
41	RASHID ABOOD	9	18	12	13

42	RADFAN AHMAD	11	10	13	13
43	AB RAHMAN	13	10	8	13
44	DEEPAK KADEE	9	12	8	12
45	SACHIN SUHOY	13	11	9	9
46	AMIT TOMBALE	12	12	11	13
47	AIJAZ AHMAD	15	14	9	14
48	ARJUN TOMARE	11	13	14	9
49	PARVAIZ	9	12	12	11
50	WASSEEM	10	9	11	10

## ***INTRODUCTION***

Health is the level of functional or metabolic efficiency of a living organism. In humans, it is the ability of individuals or communities to adapt and self-manage when facing physical, mental or social challenges. The World Health Organization (WHO) defined health in its broader sense in its 1948 constitution as "a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity." This definition has been subject to controversy, in particular as lacking operational value and because of the problem created by use of the word "complete". Other definitions have been proposed, among which a recent definition that correlates health and personal satisfaction. **Huber M, Knottnerus (2012)** Classification systems such as the WHO Family of International Classifications, including the International Classification of Functioning, Disability and Health (ICF) and the International Classification of Diseases (ICD), are commonly used to define and measure the components of health.

Systematic activities to prevent or cure health problems and promote good health in humans are undertaken by health care providers. Applications with regard to animal health are covered by the veterinary sciences. The term "healthy" is also widely used in the context of many types of non-living organizations and their impacts for the benefit of humans, such as in the sense of healthy communities, healthy cities or healthy environments. In addition to health care interventions and a person's surroundings, a number of other factors are known to influence the health status of individuals, including their

background, lifestyle, and economic, social conditions, and spirituality; these are referred to as "determinants of health." Studies have shown that high levels of stress can affect human health. **Callahan D. (1973).**

Generally, the context in which an individual lives is of great importance for both his health status and quality of their life. It is increasingly recognized that health is maintained and improved not only through the advancement and application of health science, but also through the efforts and intelligent lifestyle choices of the individual and society. According to the World Health Organization, the main determinants of health include the social and economic environment, the physical environment, and the person's individual characteristics and behaviors.

More specifically, key factors that have been found to influence whether people are healthy or unhealthy include the following: **Taylor S, Marandi A (2008)**

- Income and social status
- Social support networks
- Education and literacy
- Employment/working conditions
- Social environments
- Physical environments
  
- Personal health practices
- Healthy child development
- Biology and genetics
- Health care services
- Gender
- Culture

An increasing number of studies and reports from different organizations and contexts examine the linkages between health and different factors, including lifestyles, environments, health care organization, and health policy – such as the 1974 Lalonde report from Canada; the Alameda County Study in California; and the series of World Health Reports of the World Health Organization, which focuses on global health issues including access to health care and improving public health outcomes, especially in developing countries.

### **Lalonde, Marc(1974)**

The concept of the "health field," as distinct from medical care, emerged from the Lalonde report from Canada. The report identified three interdependent fields as key determinants of an individual's health. These are:

- Lifestyle: the aggregation of personal decisions (i.e., over which the individual has control) that can be said to contribute to, or cause, illness or death;
- Environmental: all matters related to health external to the human body and over which the individual has little or no control;
- Biomedical: all aspects of health, physical and mental, developed within the human body as influenced by genetic make-up.

The maintenance and promotion of health is achieved through different combination of physical, mental, and social well-being, together sometimes referred to as the "health triangle." The WHO's 1986 Ottawa Charter for Health Promotion further stated that health is not just a state, but also "a resource for everyday life, not the objective of living. Health is a positive concept emphasizing social and personal resources, as well as physical capacities."

Focusing more on lifestyle issues and their relationships with functional health, data from the Alameda County Study suggested that people can

improve their health via exercise, enough sleep, maintaining a healthy body weight, limiting **alcohol** use, and avoiding smoking. "Health" and illness can co-exist, as even people with multiple chronic diseases or terminal illnesses can consider themselves healthy. **Housman,(2005)**

The environment is often cited as an important factor influencing the health status of individuals. This includes characteristics of the natural environment, the built environment, and the social environment. Factors such as clean **water and air**, adequate housing, and safe communities and roads all have been found to contribute to good health, especially to the health of infants and children. Some studies have shown that a lack of neighborhood recreational spaces including natural environment leads to lower levels of personal satisfaction and higher levels of obesity, linked to lower overall health and well being. This suggests that the positive health benefits of natural space in urban neighborhoods should be taken into account in public policy and land use.

Genetics, or inherited traits from parents, also play a role in determining the health status of individuals and populations. This can encompass both the predisposition to certain diseases and health conditions, as well as the habits and behaviors individuals develop through the lifestyle of their families. For example, genetics may play a role in the manner in which people cope with stress, either mental, emotional or physical. For example, obesity is a very large problem in the United States that contributes to bad mental health and causes stress in a lot of people's lives. (One difficulty is the issue raised by the debate over the relative strengths of genetics and other factors; interactions between genetics and environment may be of particular importance.)



## Potential issues

There are a lot of types of health issues common with many people across the globe. Disease is one of the most common. According to GlobalIssues.org, approximately 36 million people die each year from non-communicable (not contagious) disease including cardiovascular disease cancer, diabetes, and chronic lung disease (Shah, 2014). **Nutter S. (2003)**

As for communicable diseases, both viral and bacterial, AIDS/HIV, tuberculosis, and malaria are the most common also causing millions of deaths every year (2014).

Another health issue that causes death or contributes to other health problems is malnutrition. One of the groups malnutrition affects most is young children. Approximately 7.5 million children under the age of 5 die from malnutrition, and it is usually brought on by not having the money to find or make food (2014).

Bodily injuries are also a common health issue worldwide. These injuries, including broken bones, fractures, and burns can reduce a person's quality of life or can cause fatalities including infections that resulted from the injury or the severity injury in general (**Moffett, 2013**).

Some contributing factors to poor health are lifestyle choices. These include smoking cigarettes, which according to LIVESTRONG.com kills 443,000 people each year (2013). It also can include a poor diet, whether it is overeating or an overly constrictive diet. Inactivity can also contribute to health issues and also a lack of sleep, excessive alcohol consumption, and neglect of oral hygiene (2013). There are also genetic disorders that are inherited by the person and can vary in how much they affect the person and when they surface (2013).

The one health issue that is the most unfortunate because the majority of these health issues are preventable is that approximately 1 billion people lack access to health care systems (Shah, 2014). It is easy to say that the most common and harmful health issue is that a lot of people do not have access to quality remedies.

## **MENTAL HEALTH**

The World Health Organization describes mental health as "a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community". Mental Health is not just the absence of mental illness.

Mental illness is described as 'the spectrum of cognitive, emotional, and behavioural conditions that interfere with social and emotional well-being and the lives and productivity of people. Having a mental illness can seriously impair, temporarily or permanently, the mental functioning of a person. Other terms include: 'mental health problem', 'illness', 'disorder', 'dysfunction'. **(Hungerford et al. 2012).**

Roughly a quarter of all adults 18 and over in the US suffer from a diagnosable mental illness. Mental illnesses are the leading cause of disability in the US and Canada. Examples include, schizophrenia, ADHD, major depressive disorder, bipolar disorder, anxiety disorder, post-traumatic stress disorder and autism.

Many teens suffer from mental health issues in response to the pressures of society and social problems they encounter. Some of the key mental health issues seen in teens are: depression, eating disorders, and drug abuse. There are many ways to prevent these health issues from occurring such as

communicating well with your child or a teen suffering from mental health issues. Also, remember that mental health can be treated and be attentive to your child's behavior. **Housman & Dorman (2005)**

## **Maintaining Health**

Achieving and maintaining health is an ongoing process, shaped by both the evolution of health care knowledge and practices as well as personal strategies and organized interventions for staying healthy known as Lifestyle Management.

## **Diet**

An important way to maintain your personal health is to have a healthy diet. A healthy diet includes a variety of plant-based and animal-based foods that provide nutrients to your body. Such nutrients give you energy and keep your body running. Nutrients help build and strengthen bones, muscles, and tendons and also regulate body processes (i.e. blood pressure). The food guide pyramid is a pyramid-shaped guide of healthy foods divided into sections. Each section shows the recommended intake for each food group (i.e. Protein, Fat, Carbohydrates, and Sugars). Making healthy food choices is important because it can lower your risk of heart disease, developing some types of cancer, and it will contribute to maintaining a healthy weight. Björk J, **Albin M,(2008)**

## **Exercise**

Physical exercise enhances or maintains physical fitness and overall health and wellness. It strengthens muscles and improves the cardiovascular system.

## **Role of science**

Health science is the branch of science focused on health. There are two main approaches to health science: the study and research of the body and health-related issues to understand how humans (and animals) function, and the application of that knowledge to improve health and to prevent and cure diseases and other physical and mental impairments. The science builds on many sub-fields, including biology, biochemistry, physics, epidemiology, pharmacology, medical sociology. Applied health sciences endeavor to better understand and improve human health through applications in areas such as health education, biomedical engineering, biotechnology and public health.

Organized interventions to improve health based on the principles and procedures developed through the health sciences are provided by practitioners trained in medicine, nursing, nutrition, pharmacy, social work, psychology, occupational therapy, physical therapy and other health care professions. Clinical practitioners focus mainly on the health of individuals, while public health practitioners consider the overall health of communities and populations. Workplace wellness programs are increasingly adopted by companies for their value in improving the health and well-being of their employees, as are school health services in order to improve the health and well-being of children. **Shah, Anup (2014)**

## **Role of public health**

Public health has been described as "the science and art of preventing disease, prolonging life and promoting health through the organized efforts and informed choices of society, organizations, public and private, communities and individuals." It is concerned with threats to the overall health of a community

based on population health analysis. The population in question can be as small as a handful of people or as large as all the inhabitants of several continents (for instance, in the case of a pandemic). Public health has many sub-fields, but typically includes the interdisciplinary categories of epidemiology, biostatistics and health services. Environmental health, community health, behavioral health, and occupational health are also important areas of public health.

The focus of public health interventions is to prevent and manage diseases, injuries and other health conditions through surveillance of cases and the promotion of healthy behavior, communities, and (in aspects relevant to human health) environments. Its aim is to prevent health problems from happening or re-occurring by implementing educational programs, developing policies, administering services and conducting research.<sup>[32]</sup> In many cases, treating a disease or controlling a pathogen can be vital to preventing it in others, such as during an outbreak. Vaccination programs and distribution of condoms to prevent the spread of communicable diseases are examples of common preventive public health measures, as are educational campaigns to promote vaccination and the use of condoms (including overcoming resistance to such).

Public health also takes various actions to limit the health disparities between different areas of the country and, in some cases, the continent or world. One issue is the access of individuals and communities to health care in terms of financial, geographical or socio-cultural constraints to accessing and using services. Applications of the public health system include the areas of maternal and child health, health services administration, emergency response, and prevention and control of infectious and chronic diseases.

The great positive impact of public health programs is widely acknowledged. Due in part to the policies and actions developed through public health, the 20th century registered a decrease in the mortality rates for infants and children and a continual increase in life expectancy in most parts of the world. For example, it is estimated that life expectancy has increased for Americans by thirty years since 1900, and worldwide by six years since 1990.

**Moffett, Tamara.(2014)**

### **Self-care strategies**

Personal health depends partially on the active, passive, and assisted cues people observe and adopt about their own health. These include personal actions for preventing or minimizing the effects of a disease, usually a chronic condition, through integrative care. They also include personal hygiene practices to prevent infection and illness, such as bathing and washing hands with soap; brushing and flossing teeth; storing, preparing and handling food safely; and many others. The information gleaned from personal observations of daily living – such as about sleep patterns, exercise behavior, nutritional intake and environmental features – may be used to inform personal decisions and actions (*e.g.*, "I feel tired in the morning so I am going to try sleeping on a different pillow"), as well as clinical decisions and treatment plans (*e.g.*, a patient who notices his or her shoes are tighter than usual may be having exacerbation of left-sided heart failure, and may require diuretic medication to reduce fluid overload).

Personal health also depends partially on the social structure of a person's life. The maintenance of strong social relationships, volunteering, and other social activities have been linked to positive mental health and also increased longevity. One American study among seniors over age 70, found that

frequent volunteering was associated with reduced risk of dying compared with older persons who did not volunteer, regardless of physical health status. Another study from Singapore reported that volunteering retirees had significantly better **performance scores**, fewer depressive symptoms, and better mental well-being and life satisfaction than non-volunteering retirees.

Prolonged psychological stress may negatively impact health, and has been cited as a factor in cognitive impairment with aging, depressive illness, and expression of disease. Stress management is the application of methods to either reduce stress or increase tolerance to stress. Relaxation techniques are physical methods used to relieve stress. Psychological methods include cognitive therapy, meditation, and positive thinking, which work by reducing response to stress. Improving relevant skills, such as problem solving and time management skills, reduces uncertainty and builds confidence, which also reduces the reaction to stress-causing situations where those skills are applicable. **World Health Organization (2005)**.

### **Occupational Health:**

In addition to safety risks, many jobs also present risks of disease, illness and other long-term health problems. Among the most common occupational diseases are various forms of pneumoconiosis, including silicosis and coal worker's pneumoconiosis (black lung disease). Asthma is another respiratory illness that many workers are vulnerable to. Workers may also be vulnerable to skin diseases, including eczema, dermatitis, urticaria, sunburn, and skin cancer. Other occupational diseases of concern include carpal tunnel syndrome and lead poisoning.

As the number of service sector jobs has risen in developed countries, more and more jobs have become sedentary, presenting a different array of

health problems than those associated with manufacturing and the primary sector. Contemporary problems, such as the growing rate of obesity and issues relating to stress and overwork in many countries, have further complicated the interaction between work and health. **Winslow CE (1920).**

Many governments view occupational health as a social challenge and have formed public organizations to ensure the health and safety of workers. Examples of these include the British Health and Safety Executive and in the United States, the National Institute for Occupational Safety and Health, which conducts research on occupational health and safety, and the Occupational Safety and Health Administration, which handles regulation and policy relating to worker safety and health.

Mental health is a level of psychological well-being, or an absence of a mental disorder; it is the "psychological state of someone who is functioning at a satisfactory level of emotional and behavioral adjustment". From the perspective of positive psychology or holism, mental health may include an individual's ability to enjoy life, and create a balance between life activities and efforts to achieve psychological resilience. According to World Health Organization (WHO) mental health includes "subjective well-being, perceived self-efficacy, autonomy, competence, intergenerational dependence, and self-actualization of one's intellectual and emotional potential, among others." WHO further states that the well-being of an individual is encompassed in the realization of their abilities, coping with normal stresses of life, productive work and contribution to their community. However, cultural differences, subjective assessments, and competing professional theories all affect how "mental health" is defined. **Harris AH, Thoresen CE (2005).**



A person struggling with his or her behavioral health may face stress, depression, anxiety, relationship problems, grief, addiction, ADHD or learning disabilities, mood disorders, or other psychological concerns. Counselors, therapists, life coaches, psychologists, nurse practitioners or physicians can help manage behavioral health concerns with treatments such as therapy, counseling, or medication. The new field of global mental health is "the area of study, research and practice that places a priority on improving mental health and achieving equity in mental health for all people worldwide". Schwingel A, Niti MM, Tang C, Ng TP (2009). "

Some mental health clinics are now identified by the phrase *behavioral wellness*.

### **History:**

In the mid-19th century, William Sweetzer was the first to clearly define the term "mental hygiene" which can be seen as the precursor to contemporary approaches to work on promoting positive mental health. Isaac Ray, one of the thirteen founders of the American Psychiatric Association, further defined mental hygiene as an art to preserve the mind against incidents and influences which would inhibit or destroy its energy, quality or development.

Dorothea Dix (1802–1887) was an important figure in the development of "mental hygiene" movement. Dix was a school teacher who endeavored throughout her life to help those suffering from mental illness, and to bring to light the deplorable conditions into which they were put. This was known as the "mental hygiene movement". Before this movement, it was not uncommon that people affected by mental illness in the 19th century would be considerably neglected, often left alone in deplorable conditions, barely even having sufficient clothing. Dix's efforts were so great that there was a rise in the

number of patients in mental health facilities, which sadly resulted in these patients receiving less attention and care, as these institutions were largely understaffed.

At the beginning of the 20th century, Clifford Beers founded the National Committee for Mental Hygiene and opened the first outpatient mental health clinic in the United States of America. **Kitchener, BA & Jorm, AF, 2002**

The mental hygiene movement, related to the social hygiene movement, had at times been associated with advocating eugenics and sterilisation of those considered too mentally deficient to be assisted into productive work and contented family life. After year 1945, references to mental hygiene were gradually replaced by the term 'mental health'.

### **Significance:**

Evidence from the World Health Organization suggests that nearly half of the world's population are affected by mental illness with an impact on their self-esteem, relationships and ability to function in everyday life. An individual's emotional health can also impact physical health and poor mental health can lead to problems such as substance abuse

Maintaining good mental health is crucial to living a long and healthy life. Good mental health can enhance one's life, while poor mental health can prevent someone from living an enriching life. According to Richards, Campania, & Muse-Burke (2010) "There is growing evidence that is showing emotional abilities are associated with prosocial behaviors such as stress management and physical health" (2010). It was also concluded in their research that people who lack emotional expression are inclined to anti-social behaviors. These behaviors are a direct reflection of their mental health. Self-destructive acts may take

place to suppress emotions. Some of these acts include drug and alcohol abuse, physical fights or vandalism. Patel, V., Prince, M. (2020 )

## Perspectives :

### Mental well-being

Mental health can be seen as an unstable continuum, where an individual's mental health may have many different possible values. Mental wellness is generally viewed as a positive attribute, even if the person does not have any diagnosed mental health condition. This definition of mental health highlights emotional well-being, the capacity to live a full and creative life, and the flexibility to deal with life's inevitable challenges. Some discussions are formulated in terms of contentment or happiness. Many therapeutic systems and self-help books offer methods and philosophies espousing strategies and techniques vaunted as effective for further improving the mental wellness. Positive psychology is increasingly prominent in mental health.

A holistic model of mental health generally includes concepts based upon anthropological, educational, psychological, religious and sociological perspectives, as well as theoretical perspectives from personality, social, clinical, health and developmental psychology.

An example of a wellness model includes one developed by Myers, Sweeney and Witmer. It includes five life tasks—essence or spirituality, work and leisure, friendship, love and self-direction—and twelve sub tasks—sense of worth, sense of control, realistic beliefs, emotional awareness and coping, problem solving and creativity, sense of humor, nutrition, exercise, self care, stress management, gender identity, and cultural identity—which are identified as characteristics of healthy functioning and a major component of wellness. The components provide a means of responding to the circumstances

of life in a manner that promotes healthy functioning. The population of the USA in its majority is considered to be mostly uneducated on the subjects of mental health . Another model is psychological well-being. **Johns Hopkins University. (2077)**

### **Prevention**

Mental health can also be defined as an absence of a mental disorder. Focus is increasing on preventing mental disorders. Prevention is beginning to appear in mental health strategies, including the 2004 WHO report "Prevention of Mental Disorders", the 2008 EU "Pact for Mental Health" and the 2011 US National Prevention Strategy. Prevention of a disorder at a young age may significantly decrease the chances that a child will suffer from a disorder later in life. **V.M., Steward, S.H. (2090).**

### **Cultural and religious considerations**

Mental health is a socially constructed and socially defined concept; that is, different societies, groups, cultures, institutions and professions have very different ways of conceptualizing its nature and causes, determining what is mentally healthy, and deciding what interventions, if any, are appropriate. Thus, different professionals will have different cultural, class, political and religious backgrounds, which will impact the methodology applied during treatment.

Research has shown that there is stigma attached to mental illness. In the United Kingdom, the Royal College of Psychiatrists organized the campaign *Changing Minds* (1998–2003) to help reduce stigma.

Many mental health professionals are beginning to, or already understand, the importance of competency in religious diversity and spirituality. The American Psychological Association explicitly states that religion must be respected.

Education in spiritual and religious matters is also required by the American Psychiatric Association. **Clifford Beers Clinic. (2006)**

Emotional mental disorders are a leading cause of disabilities worldwide. Investigating the degree and severity of untreated emotional mental disorders throughout the world is a top priority of the World Mental Health (WMH) survey initiative, which was created in 1998 by the World Health Organization (WHO). "Neuropsychiatric disorders are the leading causes of disability worldwide, accounting for 37% of all healthy life years lost through disease. These disorders are most destructive to low and middle-income countries due to their inability to provide their citizens with proper aid. Despite modern treatment and rehabilitation for emotional mental health disorders, "even economically advantaged societies have competing priorities and budgetary constraints". **Tuckett, A. (2010).**

The World Mental Health survey initiative has suggested a plan for countries to redesign their mental health care systems to best allocate resources. "A first step is documentation of services being used and the extent and nature of unmet needs for treatment. A second step could be to do a cross-national comparison of service use and unmet needs in countries with different mental health care systems. Such comparisons can help to uncover optimum financing, national policies, and delivery systems for mental health care." **C. Muse-Burke J.L (2010).**

Knowledge of how to provide effective emotional mental health care has become imperative worldwide. Unfortunately, most countries have insufficient data to guide decisions, absent or competing visions for resources, and near constant pressures to cut insurance and entitlements. WMH surveys were done in Africa (Nigeria, South Africa), the Americas (Colombia, Mexico, U.S.A), Asia

and the Pacific (Japan, New Zealand, Beijing and Shanghai in the People's Republic of China), Europe (Belgium, France, Germany, Italy, Netherlands, Spain, Ukraine), and the middle east (Israel, Lebanon). Countries were classified with World Bank criteria as low-income (Nigeria), lower middle-income (China, Colombia, South Africa, Ukraine), higher middle-income (Lebanon, Mexico), and high-income. **Keyes, Corey (2002).**

The coordinated surveys on emotional mental health disorders, their severity, and treatments were implemented in the aforementioned countries. These surveys assessed the frequency, types, and adequacy of mental health service use in 17 countries in which WMH surveys are complete. The WMH also examined unmet needs for treatment in strata defined by the seriousness of mental disorders. Their research showed that "the number of respondents using any 12-month mental health service was generally lower in developing than in developed countries, and the proportion receiving services tended to correspond to countries' percentages of gross domestic product spent on health care". "High levels of unmet need worldwide are not surprising, since WHO Project ATLAS' findings of much lower mental health expenditures than was suggested by the magnitude of burdens from mental illnesses. Generally, unmet needs in low-income and middle-income countries might be attributable to these nations spending reduced amounts (usually <1%) of already diminished health budgets on mental health care, and they rely heavily on out-of-pocket spending by citizens who are ill equipped for it". **Graham, Michael C. (2014).**

### **Emotional improvement**

Being mentally and emotionally healthy does not preclude the experiences of life which we cannot control. As humans we are going to face emotions and events that are a part of life. According to Smith and Segal,

"People who are emotionally and mentally healthy have the tools for coping with difficult situations and maintaining a positive outlook in which they also remain focused, flexible, and creative in bad times as well as good" (2011). In order to improve your emotional mental health, the root of the issue has to be resolved. **Sweeny, T.J. (1992)**. "Prevention emphasizes the avoidance of risk factors; promotion aims to enhance an individual's ability to achieve a positive sense of self-esteem, mastery, well-being, and social inclusion" (Power, 2010). It is very important to improve your emotional mental health by surrounding yourself with positive relationships. We as humans, feed off companionships and interaction with other people. Another way to improve your emotional mental health is participating in activities that can allow you to relax and take time for yourself. Yoga is a great example of an activity that calms your entire body and nerves. According to a study on well-being by Richards, Campania and Muse-Burke, "mindfulness is considered to be a purposeful state, it may be that those who practice it believe in its importance and value being mindful, so that valuing of self-care activities may influence the intentional component of mindfulness". **Witmer, J.M. (2000)**.

### **Diabetes mellitus (DM),**

commonly referred to as diabetes, is a group of metabolic diseases in which there are high blood sugar levels over a prolonged period. Symptoms of high blood sugar include frequent urination, increased thirst, and increased hunger. If left untreated, diabetes can cause many complications. Acute complications include diabetic ketoacidosis and nonketotic hyperosmolar coma. Serious long-term complications include cardiovascular, stroke, kidney failure, foot ulcers and damage to the eyes.

Diabetes is due to either the pancreas not producing enough insulin or the cells of the body not responding properly to the insulin produced. There are three main types of diabetes mellitus:

- Type 1 DM results from the body's failure to produce enough insulin. This form was previously referred to as "insulin-dependent diabetes mellitus" (IDDM) or "juvenile diabetes". The cause is unknown.
- Type 2 DM begins with insulin resistance, a condition in which cells fail to respond to insulin properly. As the disease progresses a lack of insulin may also develop. This form was previously referred to as "non insulin-dependent diabetes mellitus" (NIDDM) or "adult-onset diabetes". The primary cause is excessive body weight and not enough exercise.
- Gestational diabetes, is the third main form and occurs when pregnant women without a previous history of diabetes develop a high blood glucose level.

Prevention and treatment involves a healthy diet, physical exercise, not using tobacco and being a weight. Blood control and proper foot care are also important for people with the disease. Type 1 diabetes must be managed with insulin injections. Type 2 diabetes may be treated with medications with or without insulin. Insulin and some oral medications can cause low blood sugar. Weight loss surgery in those with obesity is an effective measure in those with type 2 DM. Gestational diabetes usually resolves after the birth of the baby.

As of 2014, an estimated 387 million people have diabetes worldwide, with type 2 diabetes making up about 90% of the cases. This is equal to 8.3% of the adult population, with equal rates in both women and men. In the years 2012 to 2014, diabetes is estimated to have resulted in 1.5 to 4.9 million deaths per year. Diabetes at least doubles the risk of death. The number



of people with diabetes is expected to rise to 592 million by 2035. The global economic cost of diabetes in 2014 was estimated to be \$612 billion USD. In the United States, diabetes cost \$245 billion in 2012.

### **Blood pressure :**

Your healthcare providers will want to get an accurate picture of your blood pressure and chart what happens over time. Starting at age 20, the American Heart Association recommends a blood pressure screening at your regular healthcare visit or once every 2 years, if your blood pressure is less than 120/80 mm Hg. Your blood pressure rises with each heartbeat and falls when your heart relaxes between beats. While BP can change from minute to minute with changes in posture, exercise, stress or sleep, it should normally be less than 120/80 mm Hg (less than 120 systolic AND less than 80 diastolic) for an adult age 20 or over. About one in three U.S. adults has high blood pressure.

### **Statement of Problem:**

“A comparative study of Mental Health between diabetic and blood pressure patients of S.R.T.M University nanded”.

### **Significance of the Study:**

1. The study would be helpful to know about Mental Health between diabetic and blood pressure patients.
2. The study would be helpful to the teachers, students to take preventive measures to minimize the mental disorders.

3. This would be helpful to detached the misunderstanding about the Mental Health..

### **Objectives:**

1. To measure the Mental Health of Diabetic and Blood pressure patients.
2. The study would be helpful to determine the Mental Health status.
3. The study will help to measure the Mental disorder..

### **Hypothesis.**

1. There would be significant difference in somatic symptoms between Diabetic and Blood pressure patients of S.R.T.M University Nanded.
2. There would be significant difference in Anxiety between Diabetic and Blood pressure patients of S.R.T.M University Nanded.
3. There would be significant difference in social dysfunction between Diabetic and Blood pressure patients of S.R.T.M University Nanded.
4. There would be significant difference in Depression between Diabetic and Blood pressure patients of S.R.T.M University Nanded.

### **DELIMITATION OF THE STUDY:**

The present study was delimited to the following aspects:

1. Both Diabetic and Blood pressure patients were selected as subject for the study.
2. The subjects were selected from S.R.T.M University Nanded Campus..
3. Fifty (50) Diabetic and Fifty (50) Blood pressure patients were selected for Mental Health test.
4. The age group of the subjects was ranged between 24-35 years.

5. The subjects were divided into two age groups, Diabetic patients was the first group and blood pressure patients was the second group.
6. Appropriate questionnaire (General Mental Health) was used for collecting the data.

### **LIMITATION OF THE STUDY:**

The present study was limited to the following aspects:

1. The researcher had no control on different motivational techniques. If adopted while collecting the data which may affect the result of the study.
2. The answer given by the subjects in the questionnaire was accepted as correct so it is the limitation to the study.
3. The effect of weather conditions was considered as the limitation of the study.
4. The researcher had no control over the prevailing circumstances and exerting mental and physical condition of the subjects at the time of administering the questionnaire.

### **Operational definitions:**

#### **Mental Health:**

Mental health is a level of psychological well-being, or an absence of a mental disorder; it is the "psychological state of someone who is functioning at a satisfactory level of emotional and behavioural adjustment". From the perspective of positive or holism, mental health may include an individual's ability to enjoy life, and create a balance between life activities and efforts to achieve psychological resilience. According to World Health Organization (WHO)

mental health includes "subjective well-being, perceived self-efficacy, autonomy, competence, intergenerational dependence, and self-actualization of one's intellectual and emotional potential, among others.

### **Diabeties:**

Diabetes, often referred to by doctors as diabetes mellitus, describes a group of metabolic diseases in which the person has high blood glucose (blood sugar), either because insulin production is inadequate, or because the body's cells do not respond properly to insulin, or both. Patients with high blood sugar will typically experience polyuria (frequent urination), they will become increasingly thirsty (polydipsia) and hungry (polyphagia).

### **Blood pressure (BP):**

It is the pressure exerted by circulating blood upon the walls of blood vessels and is one of the principal vital signs. When used without further specification, "blood pressure" usually refers to the arterial pressure of the systemic circulation, usually measured at a person's upper arm. A person's blood pressure is usually expressed in terms of the systolic pressure over diastolic pressure and is measured in millimetres of mercury (mm Hg). Normal resting blood pressure for an adult is approximately 120/80 mm Hg.

### **Patient :**

A patient is any recipient of health care services. The patient is most often ill or injured and in need of treatment by physician, physician assistant, advanced practice registered nurse, psychologist, podiatrist, veterinarian, or other health care provider.

## **METHODOLOGY**

The research scholar had conducted the study entitled as “Comparision of Mental Health between Diabetic and blood pressure patients of S.R.T.M University Nanded”. For this study it was required to design the experiment and in this chapter the design of the study have been presented under following headings :

- Research Design
- Sources of Data
- Selection of subjects
- Administration of the test
- Collection of data
- Tools of the study
- Statistical procedure

### **RESEARCH DESIGN:**

The design in a research study refers to “the researcher’s overall plan for answering the researcher’s question or testing the research hypotheses” (Politet et.al, 2001, p.167). This study involves a test of two groups of patients in research. These two groups are Diabetic and Blood pressure patients taken by the investigator. Ultimately, the findings will increase the awareness of patients regarding universal health and enhance the quality of health care in country.

### **SOURCES OF DATA:**

The collection of data regarding the comparison of Mental Health between Diabetic and blood pressure patients of S.R.T.M University Nanded campus.. The Hundred (100) Diabetic and blood pressure patients were selected

by the researcher among them (50) Fifty were Diabetic and (50) Fifty were blood pressure. All of these selected players were act as sources of data.

### **SELECTION OF SUBJECTS:**

The subjects were selected randomly for the present study in the following manner.

1. The (100) Diabetic and blood pressure patients were selected and their age was ranged from 24-35 years. The subjects were divided into two groups. Group one of Diabetic patients and the second group of blood pressure patients respectively.

### **ADMINISTRATION OF THE TEST:**

To collect data on the selected subjects, The General Mental Health questionnaires were administered on selected Diabetic and Blood Pressure patients, before one hour the instructions were given to the subjects before filling the questionnaire by the researcher.

### **COLLECTION OF DATA:**

The data was collected through the (General Mental Health) questionnaire from (100) hundred Diabetic and Blood pressure patients. The (General Mental Health) questionnaire was given to all samples and the questionnaire was received with the researcher by the direct contact to all the subjects.

### **TOOLS OF THE STUDY:**

To collect the data only (General Mental Health) questionnaire was used for the tool of the study.

### **STATISTICAL ANALYSIS:**

For the analyze of data Mean, Standard deviation and T- ratio were used to analyze the data. The level of significant was setup at 0.05.

Formula for Mean, Standard deviation and T- ratio are as below:

$$M = \sum X/N$$

$$S.D = \sqrt{\sum X^2/N}$$

$$T\text{- Ratio} = \frac{M1 - M2}{\text{Critical ratio}}$$

### **AVERAGE OR MEAN:**

Arithmetic average is the most important average. It is used by every man in daily life. Arithmetic average or mean of a series is calculated by adding up all the values of items and dividing the result by the number of items.

The arithmetic mean is the "standard" average, often simply called the "mean".

$$\bar{x} = \frac{1}{n} \cdot \sum_{i=1}^n x_i$$

### **STANDARD DEVIATION:**

Standard deviation is the square root of the arithmetic mean of the squares of deviations of the items from there arithmetic mean. Standard deviation is called the second moment of dispersion.

## **STATISTICAL ANALYSIS AND INTERPRETATION OF DATA**

In this chapter, the collected data from Diabetic and Blood pressure patients were analysis by employing statistical tests. The present chapter is dedicated to the presentation of results along with discussion of findings. The results and discussions have been presented in concise and comprehensive manner that is easy to comprehend. The computed data is presented in a logical sequence in tables and also illustrated with the help of suitable figures where ever necessary.

### **LEVEL OF SIGNIFICANCE:**

To test the hypothesis the level of significance was kept at 0.05 level of confidence which was considered adequate and reliable for the purpose of this study. While applying the t-test a value of 2.014 was needed for being significant at 0.05 level of confidence for 98 degree of freedom.

### **FINDINGS:**

The collected data on hundred subjects with the help of (Mental Health) questionnaire were analyzed by employing t-test. The mean, standard deviation and t-value analyzed each dependent variable separately. For the sake of convince and methodical presentation of results, following order has been adopted:



### **TABLE-1**

**Table.1: Shows statistical comparison of Mental health of Somatic symptoms of Diabetic and Blood pressure patients.**

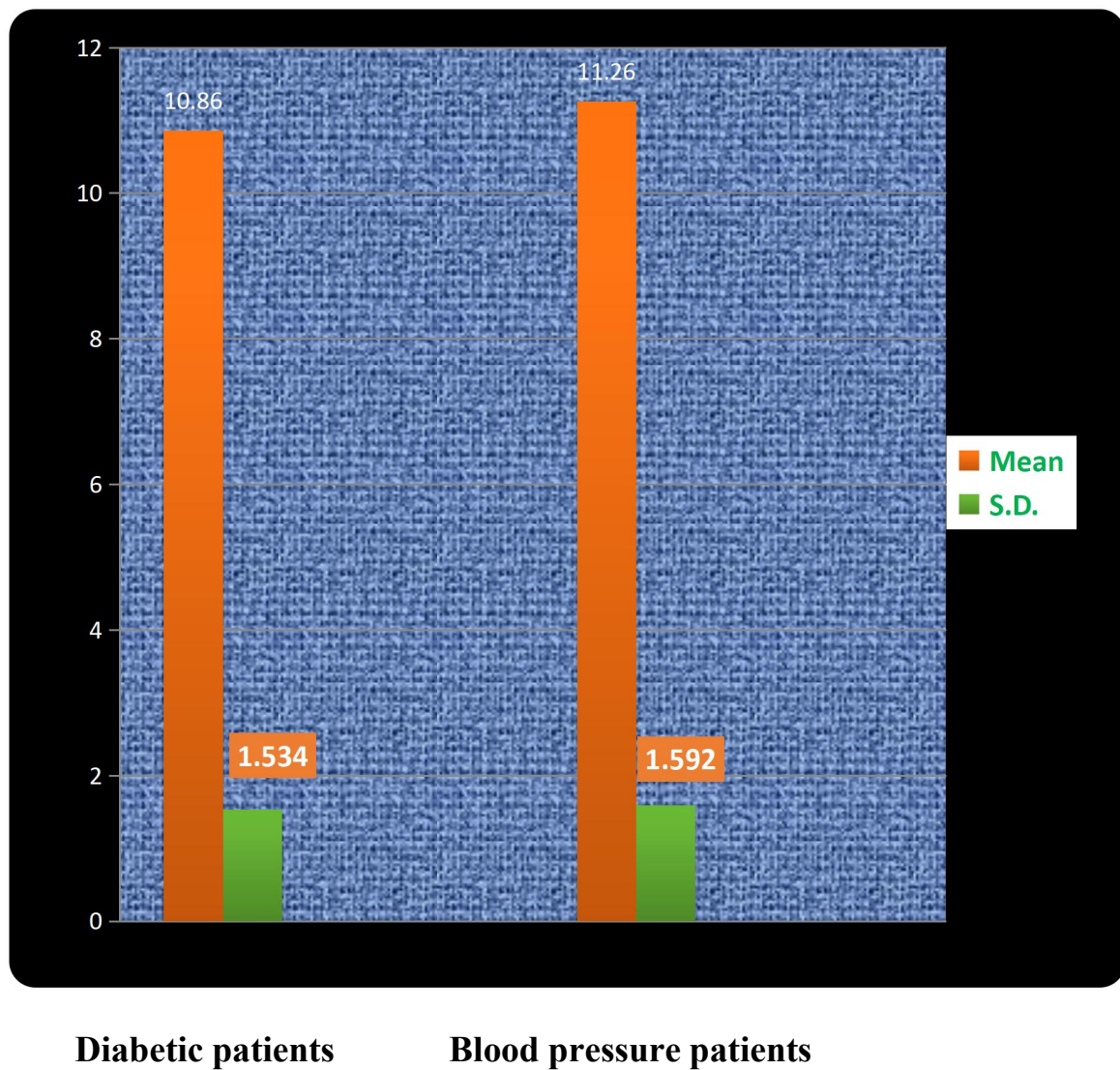
<b>Test</b>	<b>Mean score</b>	<b>SD</b>	<b>T-ratio</b>
<b>Diabetic patients</b>	<b>10.86</b>	<b>1.534</b>	<b>1.33</b>
<b>Blood pressure patients</b>	<b>11.26</b>	<b>1.529</b>	

NS=Not significant at 0.05 level of confidence

From the above table it is observed that the mean of somatic symptoms of Diabetic and Blood pressure is 10.86 and 11.26 and the t-ratio was statistically analyzed as (t=1.33). which was not significant at 0.05 level of significance. Thus the hypothesis was rejected.

## FIGURE-1

**Figure .1: Shows statistical comparison of Mental health of Somatic symptoms of Diabetic and Blood pressure patients.**



**TABLE-2**

**Table2: Shows statistical comparison of Mental health of Anxiety of Diabetic and Blood pressure patients.**

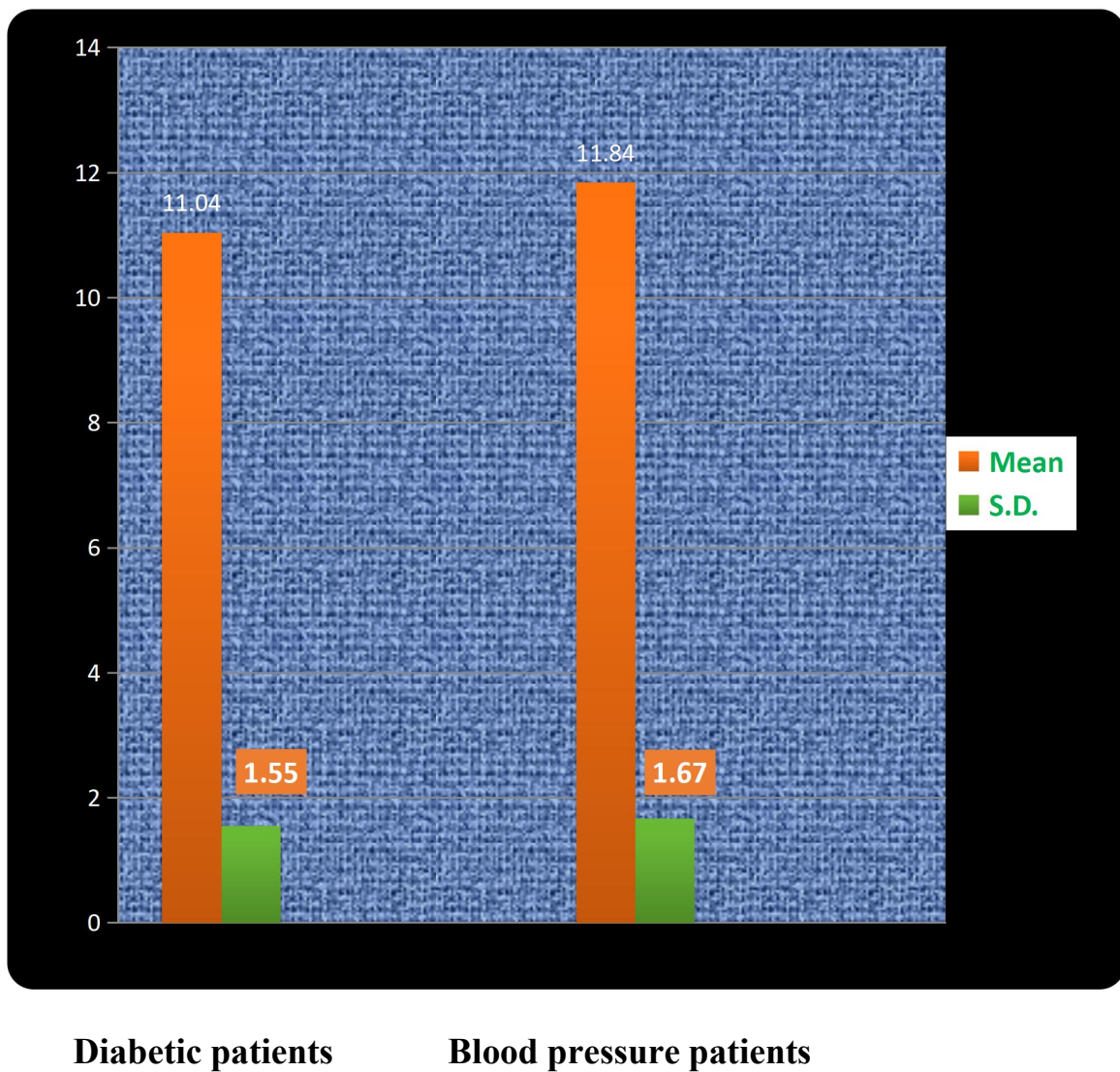
<b>Test</b>	<b>Mean score</b>	<b>SD</b>	<b>T-ratio</b>
<b>Diabetic patients</b>	<b>11.04</b>	<b>1.55</b>	<b>2.66</b>
<b>Blood pressure patients</b>	<b>11.84</b>	<b>1.67</b>	

NS=Not significant at 0.05 level of confidence

From the above table it is observed that the mean of Anxiety of Diabetic and Blood pressure is 11.04 and 11.84 and the t-ratio was statistically analyzed as (t=2.66). which was not significant at 0.05 level of significance. Thus the hypothesis was rejected.

**FIGURE-1**

**Figure .1: Shows statistical comparison of Mental health of Anxiety of Diabetic and Blood pressure patients.**



**TABLE.3**

**Table.3: Shows statistical comparison of Mental health of social dysfunction of Diabetic and Blood pressure patients.**

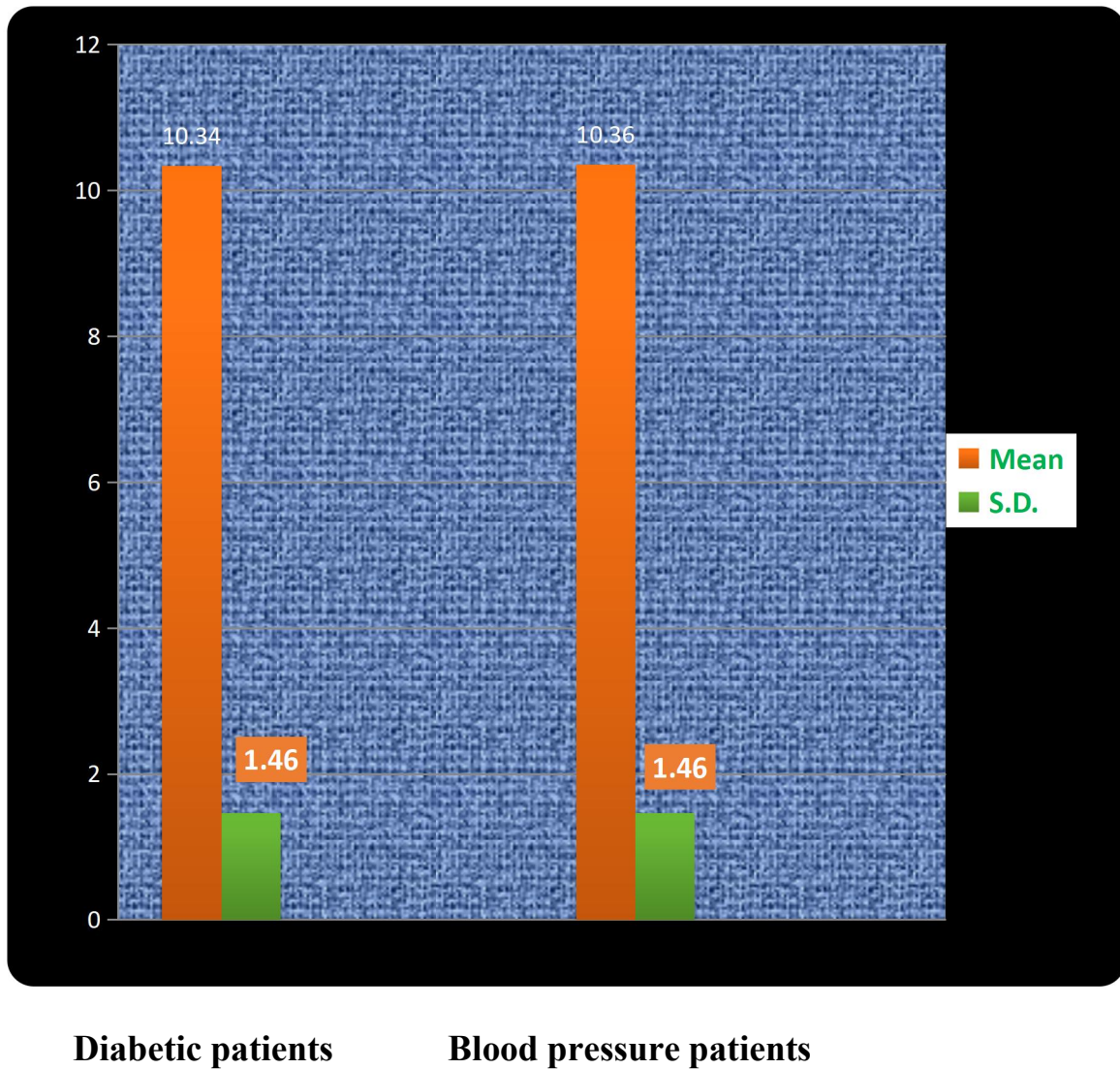
<b>Test</b>	<b>Mean score</b>	<b>SD</b>	<b>T-ratio</b>
<b>Diabetic patients</b>	<b>10.34</b>	<b>1.46</b>	<b>0.06</b>
<b>Blood pressure patients</b>	<b>10.36</b>	<b>1.46</b>	

NS=Not significant at 0.05 level of confidence

From the above table it is observed that the mean of social dysfunction of Diabetic and Blood pressure is 10.34 and 10.36 and the t-ratio was statistically analyzed as (t=0.06). which was not significant at 0.05 level of significance. Thus the hypothesis was rejected.

**FIGURE-3**

**Figure .3: Shows statistical comparison of Mental health of social dysfunction of Diabetic and Blood pressure patients.**



**TABLE-4**

**Table-4: Shows statistical comparison of Mental health of Depression of Diabetic and Blood pressure patients.**

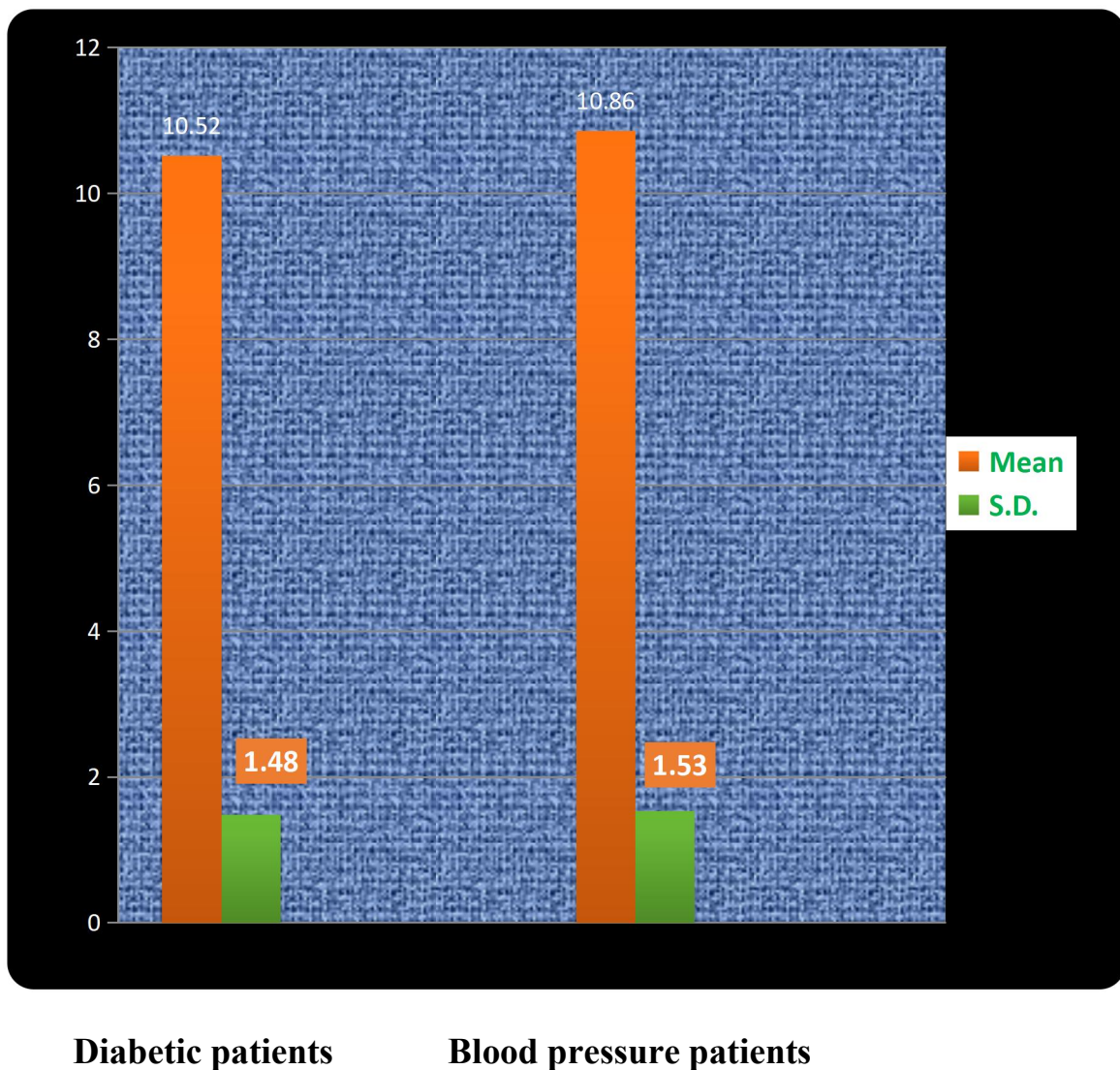
<b>Test</b>	<b>Mean score</b>	<b>SD</b>	<b>T-ratio</b>
<b>Diabetic patients</b>	<b>10.52</b>	<b>1.48</b>	<b>1.17</b>
<b>Blood pressure patients</b>	<b>10.86</b>	<b>1.53</b>	

NS=Not significant at 0.05 level of confidence

From the above table it is observed that the mean of Depression of Diabetic and Blood pressure is 10.52 and 10.86 and the t-ratio was statistically analyzed as (t=1.17). which was not significant at 0.05 level of significance. Thus the hypothesis was rejected.

**FIGURE-4**

**Figure .4: Shows statistical comparison of Mental health of Depression of Diabetic and Blood pressure patients.**





## Discussion and findings

The present study deals with Mental health of Diabetic and Blood pressure patients of S.R.T.M University Nanded.

1. The first hypothesis of the present study was that there would be significant effect of somatic symptoms on Diabetic and Blood pressure patients. The result of the study related (Table-1) in which  $t = 1.33$ , which was not significant at 0.05 level of significance. So the hypothesis was rejected.
2. The second hypothesis of the present study was that there would be significant effect of Anxiety on Diabetic and Blood pressure patients. The result of the study related (Table-2) in which  $t = 2.66$ , which was not significant at 0.05 level of significance. So the hypothesis was rejected.
3. The third hypothesis of the present study was that there would be significant effect of social dysfunction of Diabetic and Blood pressure patients. The result of the study related (Table-3) in which  $t=0.06$ , which was significant at 0.05 level of significance. So the hypothesis was rejected.
4. The fourth hypothesis of the present study was that there would be significant effect of depression of Diabetic and Blood pressure patients. The result of the study related (Table-4) in which  $t = 1.17$ , which was

not significant at 0.05 level of significance. So the hypothesis was rejected.

## **SUMMARY CONCLUSION AND RECOMENDATION**

The present study deals with Mental health of Diabetic and Blood pressure patients.

### **SUMMARY:**

The purpose of this study was to determine the Mental health of Diabetic and Blood pressure patients. it was hypothesized that there would not be significant effect Mental health of Diabetic and Blood pressure patients. In this study hundred Diabetic and Blood pressure patients were selected as subjects and where divided into two equal groups .. The data was collected with the help of (Mental health) Questionnaire. The level of significance was kept at 0.05 level of confidence.

After the analysis and interpretation of data of collected data the results of this study showed significant effect of Diabetic and Blood pressure patients which shows not significant.

### **CONCLUSION:**

The following conclusions drawn from the study

1. There was not statistically significant effect of Somatic symptoms on Diabetic and Blood pressure patients.
2. There was not statistically significant effect of Anxiety on Diabetic and Blood pressure patients.
3. There was not statistically significant effect of social dysfunction on Diabetic and Blood pressure patients.
4. There was not statistically significant effect of Depression on Diabetic and Blood pressure patients.

#### **RECOMMENDATIONS:**


In the light of results obtained and conclusions drawn the following recommendation were made for future researchers and for practical application:

1. A similar study could be done with subjects belonging to different age group other than those employed in this study.
2. A similar study could be investigated among the students at different schools, colleges and universities.
3. A comparative study could be done among other educational faculties.
4. The same study may be repeated on the other class of society for different age groups.

5. The results of this study can be used to get better and advance outcome.
6. To make the study more authentic and valid, the study may be repeated on the larger sample.

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