SUMMER PROJECT

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PART I

DALY: Disability-Adjusted Life-Years

ICD-10: International Classification of Diseases, Tenth Revision

IIT: Indian Institutes of Technology

NIMHANS: National Institute of Mental Health And Neuro- Sciences

NTSE: National Talent Search Examination

RAP-A: Resourceful Adolescent Program for Adolescents

SBMHS: School-Based Mental Health Services

WHO: World Health Organization

YLD: Years Lived with Disability

PART II

AIDS: Acquired Immunodeficiency Syndrome

CDC: Center for Disease Control and Prevention

COPD: Chronic Obstructive Pulmonary Disease

DALY: Disability adjusted life year

HIV: Human Immunodeficiency Virus

HPV: Human Papilloma Virus

JSSY: Janani Shishu Suraksha Karyakaram

LMIC: Low and Middle Income Countries

NCD: Non- Communicable disease

OECD: Organization for Economic Co-operation and Development

TB: Tuberculosis

UNAIDS: United Nations Programme on HIV and AIDS

UNICEF: United Nations Children's Fund

WHO: World Health Organization

YLD: Years Lived with Disability

YLL: Years of Life Lost

PART I

PERSPECTIVE OF PARENTS AND THEIR CHILDREN ON THE NEED FOR MENTAL HEALTH COUNSELLING IN SCHOOLS OF INDIA

ABSTRACT

Introduction: Mental disorders have become one of the major cause of disease burden around the world in present times. 197.3 million people had mental health problems in India in 2017. Around 50 million children aged 5 to 15 years suffer from mental disorders in India. All the mental health conditions which become chronic, a substantial portion occur in children and adolescents. Among the many interventions used school-based mental health services (SBMHS) were found to be very beneficial for children and adolescents.

Methods: The study is a cross sectional descriptive design in nature. Further, qualitative technique of data collection was adopted. Data was collected from 39 parents and 31 students (10-17 years) residing in India. Primary data was collected with the help of in-depth interviews. As field-based survey was not possible during this time, telephonic interviews were conducted to have the information and views of the respondents.

Conclusion: The study shows there is a serious impact of mental health poblem on the children and the parents also require help dealing with these problems. All this entails a need of counsellor for the children. But the school mental health counselling program in India is still lacking in many aspects.

Keywords: Mental disorders, disease burden, mental health, qualitative technique, in-depth interview, school mental health counselling programs

1. INTRODUCTION

Mental disorders have become one of the major cause of disease burden around the world in present times. According to the clinical descriptions and diagnostic guidelines for ICD-10 mental and behavioral disorders, mental disorder is defined as "a clinically recognizable set of symptoms or behaviors associated in most cases with distress and with interference with personal functions".

Mental disorders most commonly include depressive disorders, anxiety disorders, schizophrenia, bipolar disorder, idiopathic developmental intellectual disability (IDID), conduct disorder, autism spectrum disorders, eating disorders, attention-deficit hyperactivity disorder (ADHD) and many others (Sagar et al, 2017).

Around 197.3 million people had mental health problems in India in 2017(Sagar et al, 2017). Nearly 50 million children aged 5 to 15 years suffer from mental disorders in India (Shastri, P., 2009). All the mental health conditions which become chronic, a substantial portion occur in children and adolescents (Kessler et al,2007).

Among the many interventions used school-based mental health services (SBMHS) were found to be very beneficial for children and adolescents. In an evidence based study by Kern L. et al (2007) school-based mental health services (SBMHS) have the greatest probability of reaching youth in need.

2. LITERATURE REVIEW:

According to WHO , Mental health can be defined as a "state of well-being whereby individuals recognize their abilities, are able to cope with the normal stresses of life, work productively and fruitfully, and make a contribution to their communities." Although everyone is at a risk of attaining a mental disorder but the most vulnerable towards it are poor people, unemployed people, people with low education, people who have faced violence, migrants, refugees, indigenous populations, children, adolescents, abused women and the neglected elderly(WHO, 2003).

Referring to clinical descriptions and diagnostic guidelines for ICD-10 mental and behavioral disorders, disorders pertaining to children and adolescents are disorders of psychological development (Specific developmental disorders of speech and language, Specific developmental disorders of scholastic skills, Specific developmental disorder of motor function, Mixed specific developmental disorders, Pervasive developmental disorders, Other disorders of psychological development and Unspecified disorder of psychological development) and behavioral and emotional disorders with onset usually occurring in childhood and adolescence (Hyperkinetic disorders, Conduct disorders, Mixed disorders of conduct and emotions, Emotional disorders with onset specific to childhood, Disorders of social functioning with onset specific to childhood and adolescence, Tic disorders, Other behavioral and emotional disorders with onset usually occurring in childhood and adolescence). Other disorders can usually occur at any age, so they can also occur in children and adolescents. Examples- disorders of eating, sleeping, gender identity or phobia anxiety.

Mental disorders are the 2nd leading cause of disease burden in terms of years lived with disability (YLDs) and the 6th leading cause of disability-adjusted life-years (DALYs) in the world in 2017. Mental disorders contributed to 4·7% of the total DALYs and 14·5% of the total YLDs in India in 2017 (Sagar et al, 2017).

Among the top ten leading causes of DALY for people between the ages 15-44 years, five are mental disorders, i.e., unipolar depressive disorders, alcohol use disorders, self-inflicted injuries, schizophrenia, and bipolar affective disorder (Patel et al, 2007). Along with disability, mental disorders are also leading to mortality. This is because of increasing rate of suicide in young population (Vijayakumar U et al, 2005). In India, self-harm is the third leading cause of death in boys aged 15-19 years and second in girls aged 15-19 years (WHO, Global health estimates 2015).

There is an enormous treatment gap between the required mental disorder treatment and the treatment actually provided. According to a WHO report (2013), the lack of treatment received for mental health disorders is massive. The developed countries are having a treatment gap of around 44%-70% whereas the treatment gap in developing countries is about 90%. This is also corroborated for child and adolescent population in India who are also shown to have a treatment gap of around 90% only (Shastri PC., 2009).

Mental disorders in childhood have a very significant loss which go largely unnoticed. It effects the education as well as careers (Kessler et al., 1995). Whereas the money spent on treatment of depression and anxiety will give a four times or maybe higher return on investment (Chisholm et al., 2016).

Besides this, mental health proves to be harmful because of its comorbidities with other disorders like chronic diseases or substance abuse. People suffering from depression are at a higher risk of cancer and heart diseases. People suffering with learning difficulties or schizophrenia have higher chances of developing behavior or emotional disorders (WH0, 2013). Substance abuse is also a risk factor for mental disorder (Toumbourou JW et al, 2007).

SCHOOL MENTAL HEALTH PROGRAMS

School mental health programs are being conducted in two forms in India: the sort term course, which lacks depth and is focused mainly for teachers and the long term course which lacks a nationwide coverage (Kumar D. et al, 2015).

According to a study conducted by Barry M. M. et al (2013) commissioned by WHO, mental health interventions showed a positive result on being integrated into school education for children aged 6-18 years in low and middle income countries. It also found it to be more useful if the program is multidimensional, also consisting of social skills training, emotional regulation, cognitive behavior training, life skills training and resilience training.

Along with the fact that school-based mental health services (SBMHS) are the most likely option to reach to the youth (Kern L. et al, 2017), they are also merged with education system due to lack of resources. SBMHS reduce the cost, transportation, and accessibility that commonly hinders its access (Weist M. D et al, 2005). It also proves helpful for the students who display some signs of mental health problems but do not qualify the clinical criteria for mental health services but display early signs of mental health difficulties (Barrett P. et al, 2001).

According to Rones and Hoagwood (2000), some of the key aspects for successful implementation and running of the school mental health program are consistency of implementation, involvement of different stakeholders, like parents, teachers, and peers, integration of program elements into regular school syllabus and establishing a

developmentally relevant program elements. As stated by another researcher Kapur (1995), SBMHS should have interventions for primary, secondary, and tertiary preventions. Inclusion of all the stakeholders, parents, teachers, and mental health professionals in the program was also seen as essential.

Some school based mental health interventions are described below:

Kern L. et al, 2017 devised a three tier school mental health program. In which the first tier focuses on reducing risk factors to encourage the emotional and behavioral health and well-being of students. For example, a program to make students aware about bullying and reporting it. The second tier focuses on mentoring program which is conducted in small groups for children having say, social difficulties. The third tier is for addressing more serious behavioral and emotional problems like anxiety or depression.

NIMHANS conducts school campaigns, student programs or teacher orientation program to educate students about the mental disorders or to improve the student's relations with peers and teachers (Kumar D. et al, 2015)

RAP-A program in Mauritius has proved to be a successful short term intervention. In it trained teachers undertake group treatment program for children covering both cognitive-behavioral and interpersonal approaches (Rivet Duval et al, 2010).

The main problems faced during SBMHS are insufficient trained workforce, financial limitations, reluctance of schools towards the program (Kumar D. et al, 2015). It was also found that teachers took it as an extra responsibility (Shah, 2007).

PARENTAL ROLE IN CHILD'S MENTAL HEALTH AND HELP SEEKING BEHAVIOUR

In a research (Honey et al, 2014) done to know about the children and adolescent's perception regarding parental influence the following points were found to have positive result of parents influence on the child:

- first is that child does not feel a loss of their autonomy, parents should discuss this with their children
- if parents are being controlling, they should also be supportive towards the child (the parents should not just tell children the right pat but also guide them towards it)
- parents should try to understand the disease and the children , either by discussing it with them or listening to the child's perspectives
- the parent should behave in a calm and logical way rather than a rash and a harsh way
- prior family dynamics and relation should be kept in mind while designing the strategies for the child

In a study done to study the influence that the parents think they have on their children as opposed to the perception of the children on this matter suggests that children are more influenced by their parents if they are supportive and positive whereas parents thought

themselves to be more influential when they had control over their children (McElhaney et al, 2008).

Parents play the most influential role on the health seeking behavior of child (Wilson et al, 2011). Parents can have a positive as well as negative influence on the treatment seeking of their children. According to a study done by Draucker (2005) children found their parents push in the time of their resistance towards the treatment as beneficial later. So the negative side of this was shown by a study done by Rorty M. et al (1993) where study participants told that the resistance from their parents towards the treatment proved detrimental.

TEACHERS, COUNSELLORS AND SCHOOL

School based counselling is found to be more effective for the children than the professional out of school counselling because the inclusion of teachers and school in school based counselling gave it a more holistic approach (Adelman et al, 2010). Another research points towards the same thing that, school based counseling and psychosocial programs for children which have involvement of both parent and teachers can prove to be more effective and cost friendly as compared to out of school mental health services (Goldstein et al, 2007).
The school counselors are shown to get best results when they incorporate scientific knowledge and expertise and also keep in mind the school-family-professionals partnership (Adelman et al, 2010).
Joint efforts of teachers and school counsellors will be further effective in maintaining the students' academic, social, emotional, and behavioral goals (National Association of School Psychologists, 2010).

It was found in a study that teacher's support is directly related to the alteration in self-confidence and depression in students (Reddy R. et al, 2003). Teacher's good relations with parents and students in school help in mental health promotion. This can help in timely interception of behavioral problems and augment the psychosocial development and adaptation of the student. The study states that if teachers' act as mental health promoters it will help in empowering the identity of students who have emotional difficulties (Eleni N N et al, 2017).

PROBLEMS IN MENTAL HEALTH TREATMENT SEEKING BEAHVIOUR

Stigma was a big problem which made people uncomfortable in seeking treatment (Rebecca A. Vidourek et al, 2019). But another problem which has been recognized as a major difficulty is that many individuals with mental health problems do not believe that they need any type of professional treatment. In a study done by Meadows et al (2009), 86% people who needed the care did not believe so.

3. AIM AND OBJECTIVES OF THE STUDY

3.1. Aim of the study:

The aim of the study is to assess the need of mental health education in schools in India according to the perspective of parents and their children.

3.2. Objective of the study:

- To assess the views of the parents regarding need of mental health education in schools of India.
- To assess the perception of the students pertaining to need of mental health counselling in the schools.

4. METHODS AND MATERIALS:

The study is a descriptive cross sectional design in nature.

Further, qualitative technique of data collection was adopted to fulfil the goal of the study. According to LP Wong, 2008, "Qualitative data is often subjective, rich, and consists of in-depth information normally presented in the form of words. Analyzing qualitative data entails reading a large amount of transcripts looking for similarities or differences, and subsequently finding themes and developing categories." The phenomenological approach was used.

4.1. Sample Design:

4.1.1. Sample:

The respondents were parents of school going children and students (10-17 years) living in India. The data was collected from 18 states of India, i.e, Jammu and Kashmir, Punjab, Rajasthan Gujrat, Chhattisgarh, Madhya Pradesh, Delhi, Haryana, Uttarakhand, Uttar Pradesh, Bihar, Jharkhand, West Bengal, Assam, Manipur, Meghalaya, Maharashtra, Telengana. Data was tried to be collected from as many states of India as possible.

4.1.2. Sampling Technique and Frame:

To approach the respondents, an online survey form was circulated, having bilingual questions (both English and Hindi). It included questions regarding the profile of the respondent and their consent to participate voluntarily in the interview for the study. Therefore, the study was purposive in nature as the parents that agreed to be respondents were approached for this study.

4.1.3. Tools for data collection:

Primary data was collected with the help of in-depth interviews. As field-based survey was not possible during this time, telephonic interview was conducted to have the information and views of the respondents.

By and large, the interview guide had two different sections, one for the parents and another for the students. The majority of the questions were open ended. The first section included questions on the perception of parents regarding the mental health of children and their opinions regarding school mental health program. The second section asking the child on their opinion on school mental health counselling.

The telephonic interviews were recorded after getting the consent of the respondent only. No interview was recorded without having consent of the respondent. For taking interviews of the students (10-17 years), consent was taken both from the parents and the respondents.

4.2. Sample Size:

Data was collected from 39 parents and 31 students residing in India. From the states in which people were interviewed, till the saturation point was achieved.

4.3. Period of data collection:

The data for this study was collected during 14, April to 24, April 2020.

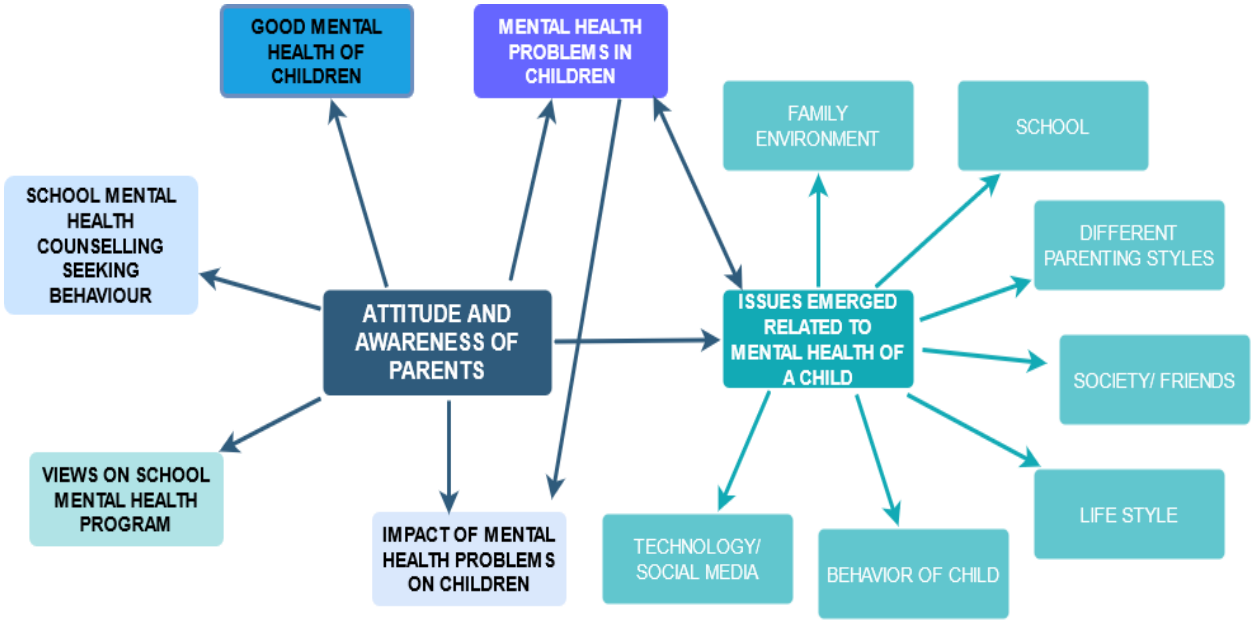
5. RESULTS AND ANALYSIS

The aim of the study was to access the need of school mental health counselling. So an attempt was made to study the attitude and awareness of parents and students about mental health and it's counselling.

5.1. ATTITUDE AND AWARENESS OF THE PARENTS REAGRDING MENTAL HEALTH

For this part parents (either mother or father) were interviewed.

Figure 1: Concept Map for Attitude and awareness of the parents



5.1.1. GOOD MENTAL HEALTH OF CHILDREN

According to WHO (2003), Good mental health is related to mental and psychological well-being.

Every parent had a different perspective on when do they consider a child mentally healthy. But some of the main themes that were identified were, when children are stress free, they have good lifestyle, good concentration, no pressure, when they are happy and able to do their daily chores.

When he is free from stress of education and moreover I think physical exercise also lead to the healthy mind. Proper diet also leads to good mental health. (Mother of a 14 year old boy, Uttarakhand)

5.1.2. MENTAL HEALTH PROBLEMS IN CHILDREN

Some mental health problems recognized were:

Figure 2. Mental health problems in children

It emerged out from the analysis that responses of the parents varied. Most of the parents recognized some or the other problems in children now a days. Stress due to various causes and depression emerged as the most prevalent problem.

> *There might be some special need for children, because when we see a mainstream classroom, we can see at least 3 or 4 children who have reading difficulties, writing difficulties, so you know special needs are there. (Mother of a 15 year old girl, Delhi)*

5.1.3. ISSUES EMERGED RELATED TO MENTAL HEALTH OF THE CHILD

i. FAMILY ENVIRONMENT

The environment in which the child grows has the main influence on a child's mental health. So parents believe that environment in which the child is growing should be a healthy and nurturing environment. There should not be any disputes in the house. Parents had a conflicting review about having a joint family as a factor contributing to this problem. Some believed that having a joint family created an additional pressure on the children of trying to fulfill everyone's wises whereas the other set believed that the child can discuss his/her problem with other family members also and other members may also be effective when they have to explain something to the child for his/her wellbeing.

"When the child gets an environment, where he can work, evolve his thinking that will be healthy environment for him. Because mind of children gets upset or react over little things also." (Father of a 12 year old girl, Uttar Pradesh)

"When the environment of the house is good then the child is mentally healthy. If there is any problem or disputes at the house, the child's mental health will be affected." (Mother of a 17 year old girl, Delhi)

"They see turmoil at home. These kinds of things could effect a child's mental health. Also a child being suppressed by a sibling or a friend, they may vent out their anger elsewhere. Here I think a child might start developing a mood variation." (Mother of an 8 year old girl Mumbai)

"It depends on the family conditions, like we used to live in a joint family, so there is more pressure. The child used to think before doing anything that grandfather will scold or someone else will scold. How is he brought up?" (Mother of a 14 year old boy, J&K)

"Today's micro families don't have grandparents, aunt uncle etc. Which also creates a problem." (Father of a 14 year old girl, West Bengal)

Two parents in this interview were teachers and both of them shared instances of their classes where the disputes between the parents affected the child.

"I have one example, I have a strict rule and I do not allow students to come in my class after 7. She told me that I am very sorry for coming late, and when I asked her what happened. She told me sir I am in a very big problem help me sir. She then told that my parents quarrelling the whole night, I was frightened and did not know what to do. Sir please help me. I counselled her and gave her some advice. I think she was able to manage herself in the situation. So parent's problems also effect the children." (Father of a 14 year old girl, West Bengal)

"I have seen cases in my life. A student in my class was not his usual self so I asked him, then that child told me that his mother and father are having a fight at home and that is affecting him. So I tried to give him advice." (Father of a 14 year old boy, Gujrat)

Some other problems parents thought which effects their children is when both the parents are working so they are not able to give proper attention to the child. Also another important issue which parents worry about is the generation gap between the parents and children.

So when we are talking about working mothers, you do not have time to engage in activities of the child. You are just managing the basics of their lives. See for non-working mother you see a lot of difference in the child. The child constantly has a mother who is telling them do this do that and then you have this set of children who are left on their own to figure it out because their mother is not available. Sometimes that plays a role in them because then insecurities comes into factor, you know that we don't have the support we want. (Mother of a 16 year old boy and a 12 year old girl, Maharashtra)

The generation gap between parents and the students cause a problem. If parents deny them to do anything that creates a problem. (Mother of a 16 year old girl, Himachal Pradesh)

Now there is a generation gap between the parents and the children. Now a days children are more sensitive. So parents also have this fear, that if they say something to their children, their children might take some drastic step or may commit suicide. (Father of a 16 year old boy, Gujrat)

Parents have repeatedly said the environment around the students is a major affecting factor. So the current environment of pandemic might also be affecting the child's mental health negatively.

A child is mentally healthy when we do not have situations like this (pandemic and lockdown). (Mother of a 17 year old boy, Rajasthan)

Right now there is tension because of lockdown. (Father of a 12 year old boy, Meghalaya)

ii. SCHOOL

Schools are an important part for the growth of the students. But sometimes it also plays a detrimental role in child's growth. Many parents stated some reasons related to school that also affect the mental health of the child.

The factors identified in school were bullying, the loads of homework given, examination stress, and the pressure to perform best in extra-curricular activities as well as studies. Some parents also identified that teachers are putting undue pressure on the students and others believed that the teachers taught everyone in the same pattern and do not pay attention on the mediocre students in the class, affecting the children. Keeping institutes like IITs on a high pedestal and giving it the utmost importance is also creating pressure on the children.

A lot of problems children are facing now a days is also primarily because of bullying in school. (Mother of an 8 year old girl, Mumbai)

They take lot of stress and anxiety due to the studies, because they have become more competitive in studies now a days. (Mother of a 14 year old boy, Uttarakhand)

Some may have examination stress or tension like where they are not able to talk to anyone… Negative factors might be peer pressure from students or pressure from your teachers, too much of stress in life and not giving one enough time to recuperate, get yourself together and give time to yourself. (Mother of a 16 year old boy, Assam)

There is loads of homework. They are made to do so much of extra activities. More attention is given on these extra activities instead of their studies. (Mother of a 13 year old boy, Uttar Pradesh)

They feel pressure because of the tons of homework given to them. And second is effect of technology. Like my child gets even his homework on apps or website, so even this is

stressful for them. And the environment of the school also matters. (Father of a 12 year old girl, Uttar Pradesh)

In standard IX only they start syllabus of standard X for making time for NTSE, Olympiads etc. So this is extra burden that is causing children to loose their interest and children are not even able to cope with all this. They should give quality time to the students and not quantity time. (Mother of a 15 year old boy, Madhya Pradesh)

Teachers should also understand. Like now if a child goes to IIT, then only it is good. So all this comparison should not happen, it leaves very deep marks on the child. (Father of a 14 year old boy, Gujrat)

And teachers teach in one way for all the students and students understand by different ways so that is also a problem. (Mother of a 14 year old boy, Jammu and Kashmir)

In schools, teachers don't differentiate between students, some students are fast learners, some mediocre and some slow learners. But everyone is taught in the same way and more focus is given to fast learners only. (Mother of a 9 year old boy, Assam)

iii. DIFFERENT PARENTING STYLES

Maccoby and Martin (1983) divided parenting styles into the following:

1. Neglecting parenting style- They are neither responsive nor demanding.
2. Permissive parenting style- They are less demanding and more responsive
3. Authoritarian parenting style- They have low responsiveness and high demands.
4. Authoritative parenting style- They have high demands as well as high responsiveness.

Based on the responses of the parents the behavior of the parents towards their children can be arranged on the basis of above divisions and its effect on the children can be seen.

1. Neglecting parents

   According to the respondents this is a harmful trait which will cause harm to the child. In such cases there are high chances of any mental health problem of the child going undetected for long durations.

   The parents who don't care about their child later realize that the child is suffering from a problem. Other parents take them for counselling session, go to psychiatrist or give them guidance. (Mother of a 14 year old boy, Uttarakhand)

2. Permissive parents

   These parents are usually indulgent. No parent among the respondents commented on any such behavior.

3. Authoritarian parents

The respondents believed this creates a barrier for communication between the parents and the children and also causes mental health problems for the child.

A child may face these problems if he keeps these to himself or herself and don't talk to their parents about their problems. And sometimes there is a communication problem between the child and the parent. If the parents are too strict, the child may feel like he/ she can't share their problem. They may feel like it's difficult for them or their parents won't understand them, it is the biggest problem adolescents are facing. (Mother of a 16 year old boy, Assam)

Mostly parents force their children very much, do this do that. Small children are bound in so many rules and regulations. The child may fair well but the pressure that is created, weighs the child down. (Mother of a 14 year old girl, Maharashtra)

Sometimes parents force their children very much, so the child is not able to study in so much tension. Under stress no work gives good result. It effects mental health in a long period. Studies have become only a means to earn money. The parents create competition of their kids with other children and thus creates even more tension in the kids. We should do something which increases their enthusiasm. Children should also do hard work and parents should also think about solution for the problems of their children. Competition is very detrimental, it effects the child's mind and future. (Father of a 14 year old boy, Gujrat)

4. Authoritative parents

   All the parents believe this parenting style to be the most successful. They believe that they should be strict as well as lenient with the child as the situation demands. Also they think that it is important to understand the child. They also understand child should be shown love and be praised to motivate them.

Parents have to delve deep and understand if their child is having any problem that they are not able to share with them, any problem in school or with friends. Some children do not share these problems with anyone. Parents have to be friendly, and have to understand that how can they make their children understand something. (Mother of a 9 year old boy, Assam)

Parents should understand and tell their children that they should do what they are able to do and not force them or pressurize them to do everything. (Mother of a 13 year old boy, Uttar Pradesh)

Some parents understand that their kid has lost interest (in studies), they discuss the problem with their kids, explain things to their children. Some parents blame their children only. (Mother of a 15 year old boy, Madhya Pradesh)

Everyone needs love and respect, be it a 6 months old baby or 60 years old person. How much you are pressurizing the child, how much you are motivating him, praising them, all this have an effect. If you are always criticizing the child, then his personality will not be able to bloom and if we are motivating them, the opposite happens. (Mother of a 13 year old girl, Chhattisgarh)

Parents should try reasoning with the child. And very very important today for the parents is they should be approachable to the child. The child should be able to talk to their parents about anything. Now from a very young age they have boyfriend/girlfriend, so parents, someone should be able to know things as to where their children are headed and only way to do it is if you be a child's friend. Either you make it or you fake it but that is where you need to arrive, you should know what your children are doing and should be well aware what is going on with their lives. (Mother of an 8 year old girl, Maharashtra)

If parent is doing parenting very well, parent will be able to understand the changes in the child's behavior very clearly, if the parent is really observant, they'll be able to make out there is something wrong with the child, so they should be friend with the child and should not act like a very demanding parent who always give commands to the children. They should be able to understand what the child feels and the child must have the freedom to share whatever he or she feels, so until and unless that friendly relation is there between the parent and the child, they won't be able to share anything with the parent, so the parent should develop such kind of relationship. (Mother of a 15 year old girl, Delhi)

iv. SOCIETY / FRIENDS

Peer pressure from friends or society was also found to be big factor affecting the mental health of the students. The judgement passed on the children by the society also affect the children. The self-esteem of the child is affected. Also there is a high competition in today's society and between peers.

Any problem with friends or even when they go to the playgrounds, there also there might be a problem. (Father of a 12 year old girl, Uttar Pradesh)

They have peer pressure to prove themselves better and they want to stand best in the society. So these challenges have created more stress in them. (Mother of a 14 year old boy, Uttarakhand)

I think there is a lot of peer pressure. I am talking about specially Mumbai, the experience I went through as a mother dealing with it. Because see after a certain age the behavior of the kids changes and because we are working parents we are not able to keep a tab actually to when the shift happens. So what happens generally is that the shift happens because of the peer pressure in the school, peer pressure in the society. (Mother of a 16 year old boy and a 12 year old girl, Maharashtra)

To some children it is very important to them what other people say to them, may it be related to their looks, behavior, or studies. To some children this matters a lot and hence effects then. (Mother of a 13 year old girl, Chhattisgarh)

v. LIFE STYLE

Parents believed living a bad life style also affects the mental health. Because mental health is also associated with physical health.

Somewhere a bad lifestyle also affects them. (Mother of a 14 year old boy, Uttarakhand)

If a child is not eating healthy, it will affect. If a child is not playing outside, or does not have lot of friends, good quality of friends, it will affect the child. And moreover the things a child sees like maybe on a television or anywhere, which also affects the child. (Mother of a 16 year old girl, Uttarakhand)

vi. BEHAVIOUR OF CHILD

Some parents believed that the over possessive and demanding nature of the children is leading to increased anger issues that might be affecting child's mental health.

Children are very over possessive about their belongings, their parents, about themselves. Everything is theirs, the feeling of sharing and caring has reduced. (Mother of a 17 year old girl, Delhi)

Students coming from inferior family background and the modern situation is demanding things that they are unable to get from their family. Since they are getting so there demand is also increasing. So students are not realizing the hardships of the parents and situation of the family. Lord Krishna said to Arjuna in Mahabharata "काम एष क्रोध एष रजोगुणसमुद्भवः |" which means when your demand is defeated, the angriness begets from there. This is what happens with students. Whenever the children's demands are not met they get very angry. (Father of a 14 year old girl, West Bengal)

vii. TECHNOLOY/ SOCIAL MEDIA

Technology and social media were thought to be great influencers on the mental health of children. They are said to be limiting human-human interaction. There is a growing worry about mobile addiction. Parents also worry that the children might be getting misused by other people through social media, creating stress in the students.

The other factor I think is technology. Earlier there was more interaction between a child and a teacher, now everything is covered by technology, somewhere the child has stopped realizing the importance of a teacher. (Mother of a 14 year old boy, Uttarakhand)

There is an increase in distractions from all fronts, be it mobile apps, games. The children's mind is always occupied, it is never relaxed. (Mother of a 14 year old boy, J&K)

Now there is a lot of children's involvement in social media, right? So if the child is getting involved in any unwanted kind of connection or relations in the social media also, it can develop a kind of stress amongst children, they might be misused by other people, so that could also be a reason for such kind of mental issue. (Mother of a 15 year old girl, Delhi)

Addiction to phone effects mental health. And when they remain on phone all the time, negativity comes from there. I myself have seen that when I spend more time on phone, it's rays definitely effect you. (Mother of a 17 year old boy, Rajasthan)

5.1.4. MENTAL HEALTH PROBLEMS AFFECT ON STUDENTS

Mental health problems was found affecting-behavior (namely mood variations, angry, irritability), change in food habits or sleeping pattern, and a deteriorating academic performance (either through less concentration or forgetfulness). Other than this, parents also said that suicide has become an increasing prevalent problem when the children are not able to cope with their problems. Substance addiction was also reported by some of the respondents.

This affects their food habits, their intake of food is less and there is sleep deprivation. (Mother of a 14 year old boy, Uttarakhand)

The child becomes weak in his studies, losses concentration on his studies and instead focuses on games and these activities. Some students are able to cope up with all these demands of their parents and the school. But for students who are not able to cope with both, either their studies are affected or their health. (Mother of a 13 year old boy, Uttar Pradesh)

They become irritable, stop listening to their parents. They don't pay attention in school, since no attention is given to them, they also stop giving attention. They'll stop talking to people and would like to be left alone. Stop meeting people. (Mother of a 9 year old boy- Assam)

They become dull, stop talking (to people), become angry easily, and stop listening to their parents. They become angry, stop talking, and show tantrums like they'll not eat food. (Mother of a 16 year old girl, Himachal Pradesh)

There are changes in the behavior if he is under stress. Then he is also not that fond of studies also. Mainly I think there is effect on behavior may it be in social form or at home or in schools. (Mother of a 14 year old boy- Haryana)

Child always react. Child will become restless, will start remaining alone and will become irritable. (Mother of a 16 year old girl, Uttarakhand)

They are not able to take their decision themselves. They can't concentrate properly. And when they are overburdened with work, they get hyper. (Mother of a 12 year old girl, Uttar Pradesh)

It is different for every child. Some children make their own small world and become engrossed in it. Other children try to fight it, they become so stubborn they will do the work according to themselves, they won't listen to whatever you are saying. (Mother of a 13 year old girl, Chhattisgarh)

Children loose their thinking capacity. If you keep forcing them in all things, food, their personality etc , so what will the child think. He will go in a downward spiral and it will be too much negative for them. Then he'll not be able to take his own decisions. Some children are burdened and start being very quiet. They become introverts, stop talking to others. Some take it with extreme tension. Some even commit suicide. They start suppressing their feelings. (Mother of a 14 year old girl, Maharashtra)

It will manifest in different ages differently. Probably a child who is 7 years old may try and hurt other child by throwing pencil or sharpener, or may probably throw temper tantrums in the house or may probably not even listen. If a child is consistently having a bad mood, then the parent should definitely figure out why the child is having mood swings. (Mother of an 8 year old girl, Maharashtra)

Definitely it is going to affect their lives if they are not mentally healthy and are facing any type of stress, which I shared right now, if the child is facing any such problem definitely he or she will be able to focus on their studies and definitely the marks will go down that will, their morale will go down ND their might be problem in class also, the child is not able to focus in the class and not able to submit assignments timely and getting less marks this also could be a result of these kind of issues… they confine them to their own selves, they don't want to interact with people around, with family members, some of them might engage in other methods to reduce their stress like it could be using any unwanted substances like tobacco , alcohol or any other kind of thing which is not good for children. And we are also listening to so many cases of children committing suicide as well. (Mother of a 15 year old girl, Delhi)

She learns everything but forgets during the exams. This forgetfulness is the only problem I think. (Mother of 11 and 15 year old boys, Haryana)

5.1.5. VIEWS ON SCHOOL MENTAL HEALTH PROGRAM

Maximum parents thought it was very essential for schools to have mental health counselling. They thought so because they understood sometimes children face problems that they don't want to discuss with their parents, or those who have working parents because the parents are not able to give so much time to their children. Or maybe there is a problem at home itself that the children wants to discuss. Parents also recognized the fact that there is generation gap between the parents and the children and parents can't always know how to help their children, they might themselves need some help sometimes.

Parents had various ideas regarding the implementation of this program: some wanted it as a part of curriculum, some wanted empathy to be added as a part of curriculum, some wanted a general discussion overseen by the counsellor for the students in which counsellors sees the train of thoughts of students on topics and recognize and correct the students if their thoughts are on the wrong path and some parents thought plays/skits can be shown to the students

through which they identify with the characters of the play who are having same problem like the children, it might also help the students.

There should be counselors definitely for the students, and different for junior students and senior students. So that they can talk to the students and know what they are thinking if they are facing any problem. And in higher classes 11th and 12th we see in India we have such a big problem, suicide. Students face so much of pressure. We need counseling for not only students but for parents also. They should be told if their child is facing a problem, the parents, teachers, they also have a role to play. (Mother of a 14 year old boy, Jammu and Kashmir)

See I am in favor of these things because somewhere everyone is somehow effected by their present life. And these programs actually help the child, it gives them a sense of confidence and make them realize that now they are healthy. Because realization of being mentally healthy is also required. (Mother of a 14 year old boy, Uttarakhand)

Counseling is very important in schools for the children. It is important because in this age children tend to listen and agree to teachers more than their parents. So if counseling happens they'll think more freely and listen to them. (Mother of a 9 year old boy, Assam)

It should be started in school. Because many times kids don't discuss their problems with their parents like in present times social networking is such a big thing and we don't know much about it. So they can discuss these problems with the counsellors. (Mother of a 16 year old girl, Himachal Pradesh)

I think it is important. Now a days, every parent thinks that I want to give my child everything. They have money but they don't have time. So even if the child is facing any problems, the parents are not there at the house to deal, to know about it (working parents). So if this program is there in the school, and is organized weekly or like that, then maybe the child will be able to open up and share his problems and this information will also reach the parents sooner. Sometimes the child is in some problem and is not able to share with his parents, then he himself thinks what is right and wrong. In that counseling he'll be able to know and share all this. Like now children are taught in schools about good touch - bad touch. So when a counselor comes in school, students are sometimes able to share with them what they are not able to share at their homes, may it be through painting or whatever. (Mother of a 17 year old girl, Delhi)

I don't think primary school kids need counseling. I don't think kids till class III require counseling. But after that I think counselling will be a good method (to solve their problems). (Father of a 12 year old girl, Uttar Pradesh)

Yes it should be there. Children will learn how they'll be able to deal with problems in the future also. Children understand what the teachers tell them more easily, so it is better. (Mother of a 17 year old girl, Punjab)

That is very good for the students. Children get to know what they should and should not do. They come to know about good behavior, bad behavior. They learn what kind of friends they

should keep because bad company is also very harmful. It is also very helpful for their studies. There are some things that we are not able to explain to our children, they understand those things very easily through their teachers. (Mother of a 15 year old boy, Punjab)

It is very important for counsellors to be there at schools. It is very important for 'empathy' to be there as a subject in school. For 8-9 hours of their days they are in school. Also teachers play a very active part in how the children feel these days. I strongly feel that it should be a part of the curriculum. (Mother of an 8 year old girl, Maharashtra)

It should be there. Because my son was very upset a few months back and I was thinking about taking him to a counsellor but their school didn't have any. Sometimes when the child cannot talk to their parents they can open their hearts in front of the counsellor in their school. Because we parents are also not perfect, we also make mistakes. (Mother of a 13 year old boy, Delhi)

Yes it would be a very good measure, because if children have someone in their school who they can talk to because sometimes they might feel at this age that they might not be able to talk to their parents so it would be a good thing if there is someone who he / she can talk to without feeling any embarrassment or shame. If the child can talk to someone and feel normal about the problem and feel like his problem can be solved, he might be able to perform well in other fields, concentrate on his studies, he'll be able to grow in a good manner. (Mother of a 16 year old boy, Assam)

If through counselling the students thoughts, negativity, temper, all this can be improved, that will be beneficial in future. The crimes we see in the society, rape and other crimes, these all are associated with our mind only. Because people don't know what is wrong and what is right. So all this will improve. Suppose a counsellor gives the children a situation and everyone has to give their views as to what they'll do in that situation. So through that the counsellor will know the child's thoughts and move them in a positive direction. This is a long journey and is not a small process. (Mother of a 17 year old boy, Rajasthan)

One parent had mixed views. He felt no one can counsel the children better than the parents. So they don't require counsellors. But he also recognized the fact that some parents may be very strict and the child may need the help of a counsellor to solve his/her problems.

We don't need counselling separately, that we can teach our kids in our daily routines also. They will understand slowly what is wrong and what is right. This is important where the child has strict parents. So he can get solution for his problems through counsellor. I have seen cases in my life. A student in my class was not his usual self so I asked him, then that child told me that his mother and father are having a fight at home and that is affecting him. So I tried to give in advice. I don't think anyone can counsel better than parents. I am strict as well as friendly with my children as the occasion calls, so they can always ask me. But every house does not have the same environment, some may feel better discussing their problems with their teachers. (Father of a 14 year old boy, Gujrat)

Two parents were totally against school counselling. One mother believed that counselling has become kind of a fashion and that when counselling happens in schools in front of everyone it might do the child more harm than good. The other parent believed that there is no need of counselling because no counselor can be better than the parent.

I don't think there is so much need. Like today they are becoming too much dependent on counselling. Everyone in the school does not need counselling. Maybe the child start comparison between themselves and thus create a problem. So if we really think that a child is facing some problem, there is a change in his behavior, he not able to move forward, his physical or mental health is being effected, and then only all this should be done otherwise the child is good. If there is a need then only there should be counselling. Because in school if they are counselled in groups, and the results are shown in front of everyone, the children will do comparison and that becomes unnecessary. (Mother of a 13 year old girl, Chhattisgarh)

I don't think there is a counsellor better than the parents. But children feel like if they share with third person then they are safer. But no one can guide them better than their parents. (Mother of a 16 year old girl, Chhattisgarh)

Three parents shared their experiences with the school counselling. Two parents were satisfied with the counselling provided in the school. But one parent had a bad experience with the school counseling. She was not satisfied with the counselling provided and according to her the counsellor in the school was provided more out of compulsion without checking the quality of counselling provided.

My child's school has counsellors and they come to students once in a month and ask them if they have any problems in general or any related to studies or anything. And some students who can't share their problems with their parents can share with them. (Mother of a 13 year old boy, Uttar Pradesh)

I am myself a teacher and in our school counseling is provided, there are different programs junior, middle, senior programs, all programs have a counselor. So any child who is having any kind of stress whether it is reported by teacher or by Parents, we refer them and arrange classes for them, so that is really helpful for the children. (Mother of a 15 year old girl, Delhi)

So you know what happens in schools, even though they have these psychologist to help the children. But I think it is just like a tick mark job. It's just that the school has to have so they have it. I don't think they really worry about the quality, the maturity, the experience of the person. Experience always serves better. I went to one of the counsellors in the school and I was very disappointed. I didn't receive any direction for me as a mother or my child. So I never even bothered to go back again. See now a days children don't mince words, they are very straight forward. So if they asked why don't you do it, the child is telling I don't enjoy it. But what are you (counsellor) doing about it, how are you helping the child. There is no work in progress. Nothing happens it just stops there. So it is a big area especially since the percentage of working women is going to increase substantially, it is very important for the

school to be able to guide the children. It should not be just a tick mark job, that just because you have to do it you are doing. The quality of work is very bad. So then I'll prefer to go to a professional counsellor. (Mother of a 16 year old boy and a 12 year old girl, Maharashtra)

5.1.6. SCHOOL MENTAL HEALTH COUNSELLING SEEKING BEHAVIOUR

Most parents believed that parents will not have any problem in sending their children to the school counsellor. Parents also believed that they should themselves go with their kids to the counsellor.

But some parents also identified some problems that might restrict some parents from sending their children to the counsellor. The main problems were found to be lack of awareness and the stigma attached around mental health counselling. One parent also said that she has seen a child being teased at school for going to the counsellor, which might prove to be a hindrance for the child.

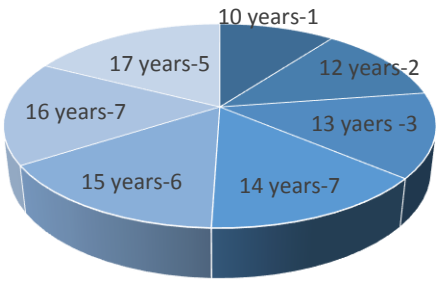
Most of them (parents) are not aware actually. Going to such a counseling session, they think their child is mentally ill. A stigma is attached to it. (Mother of a 14 year old boy, Uttarakhand)

Children are sometimes embarrassed because they are called from the class for counselling. And children even tease them. This I have seen from a personal experience. (Mother of a 14 year old girl, Maharashtra)

5.2. ATTITUDE OF STUDENTS TOWARDS SCHOOL COUNSELLING PROGRAMS

The children interviewed were from age groups 10-17 years.

Figure 3- Pie chart showing age distribution of the students interviewed



Almost all the students interviewed thought that they required the school mental health counselling programs. Most of the students shared they get very anxious before board exams and get a lot of pressure from everywhere or even during the whole IX to XII standards. They need help, motivation and guidance during that time for which they thought counselling would help.

Basically it will be a very good decision. As it is our XI class and board exams are going to be there and there is a pressure from everyone. And class IX to XII are very important, because these are the classes which set our future. (14 year old boy, Uttarakhand)

We can talk with them if we have anything we want to talk about. Like the pressure of school studies and sometimes we need it if we lose in games also. (13 year old boy, Uttar Pradesh)

Yes it is beneficial. There are problems like peer pressure, tension due to marks and mental pressure from time management and all in class XII, so it will be beneficial there. (17 year old girl, Delhi)

Yes it will be beneficial. It will help to encourage us, motivate us or it will tell us how we can do things or perform better, give certain guidance. (16 year old girl, Uttarakhand)

Some students fall in bad company, or come under peer pressure and take wrong steps, some students are not able to concentrate on their studies and instead focus on make mischief, so they all will be benefited through counseling. (15 year old boy, Punjab)

Yes it should be there. I have many friends who required the help of counsellor. We are sometimes very stressed out and we need help at that time. (16 year old boy, Gujrat)

Students face stress. Counselling will be beneficial. Through counselling the child can know himself better. The counsellor can notice the child's interest or something that will benefit and will be helpful in changing the person's life. (15 year old girl, Manipur)

We people also have a counsellor in school, so if any one has any problem, they go to the counsellor to share it. So it is actually good. If you can't talk to anyone else you can at least share your problem with the counsellor. But very few children go to the counsellor because there is a stigma attached to it. But if you'll encourage the children to share their problems with the counsellor, then that's good, it will help the students. They can also help you to make a schedule if you are not able to study. (14 year old girl, Madhya Pradesh)

But some students had a pretty bad experience with the school counsellor. The students complained that their counsellor shouted at them, or started comparing between the students. And according to one child in their school, only the students who have done something wrong is sent to the counsellor, making it a negative thing for other students.

It depends on the experience of the counselor. The counsellor should understand what the child is saying and he/she should be empathetic. In our school the counsellor starts comparing between students which should not be there. (14 year old girl, Maharashtra)

They keep shouting at us. That tell us they'll come to our class and they don't show up only. We don't go to the counsellor, the counsellor came to our class once in XI standard because of bullying. And you are sent to the counsellor only if you have done something bad. (12 year old girl, Maharashtra)

6. DISCUSSION:

This research was conducted to study the need of mental health counselling in schools in India. This was done through first identifying the attitude and awareness of parents and students towards mental health. Almost all the parents and students interviewed, had a positive approach towards it. But some were still apprehensive about the term 'mental health'. It still had a negative connotation for some.

The main mental health disorders that were found among the children came out to be depression, anxiety, irregular mood variations, learning disabilities, stress and phobias.

It is also important to take into consideration the risk factors and social determinants for the mental health problems. A major portion of these problems have causal factors that can be controlled or changed. Parents, teachers and even children have to take care of what they say to each other and how their action affects the other. The factors that were found to have an influence in mental health of the are family environment, school, parenting style of parent, company of friends, society, life style, behavior of child and technology or social media.

Also, authoritative parenting style was deemed to be the most successful among the parents. They thought they should be strict and lenient based on the situation. They believed in listening to their children so that they can solve their problems. This finding is consistent with the research done by Baumrind, 1991 in which he determined that authoritative parents are successful in keeping their kids from drug addiction.

It was also evident that these mental health problems had a serious impact in the life of children. It affected not only their day to day lives but also their futures. In extreme cases it also led to students committing suicide. So, it might be becoming a rapid growing cause of disability and mortality in India.

The parents agreed that children needed someone to share and solve their problems. If the children are not able to share it with their parents/ family, they may require a counsellor. Three major issues were identified as to why children might need the counsellor to solve their problems instead of their parents: children may have a problem which they are not comfortable sharing with their parents, they have working parents so the parents are not able to give them that much time, and parents identified that they themselves might need help because they cannot solve every problem of their children.

Most of the parents were in favor of mental health program in schools. They identified that children spend a major portion of their day in schools and so school plays a very big role in their mental health.

Some challenges recognized in the mental health counselling in schools were:

- Stigma is still attached to mental health that it is something bad.
- In some schools students are teased for going to the counsellor.
- In some cases students believe that students go to counsellor only when they have done something bad.
- The standard of counselling provided in some schools is subpar.

Some of the steps required that might improve this situation are:

- Starting a uniform evidence based school mental health counselling program.
- The problems of the students should be solved individually and not in a group. And comparison should not be made between different students.
- Creating awareness about mental health not only among the students but also among the parents and teachers is important.
- Parents and children should be asked for feedback so that any problem in the existing counselling program can be weeded out.

7. CONCLUSION:

The increasing and vast number of mental health cases in children and adolescents i.e., 50 million cases of children aged between 5 to 15 years in India (Shastri, P., 2009) along with the serious impact of these problems on the children necessitates the need of mental health counselling in schools in India. The help parents might need to solve their children's problems and the requirement of counselling as expressed by the students all further entail its need.

8. LIMITATIONS OF THE STUDY:

Although the researcher tried to collect data from all states of India but was able to collect it only from 18 states of India because of either the language barrier or the denial of consent for the interview. The online survey form was filled by 82 parents but 13 had denied the permission to call them. In other 30 cases either they were unavailable during the calls or did not give consent for the interview after asking their permission for the interview during the phone call. Also the student's replies might be biased because they were with their parents at that time and might not want to share their problems in front of their parents. The responses may also be biased because they may not want to share their problems with a stranger or because they might have gotten nervous because the conversation was being recorded.

ANNEXURE 1

The survey

1. Your Name (parent's) नाम

2. Phone number फ़ोन नंबर

3. Which state do you live in? आप किस राज्य से है ?

4. Name of your child/children बच्चे का नाम

5. Age of your child/ children आपके बच्चे की उम्र

6. Is counselling provided in your child's school? क्या आपके बच्चे के स्कूल में परामर्श प्रदान किया जाता है?

i. Yes

ii. No

iii. Don’t know

7. Do you think counselling should be provided in schools? क्या आपको लगता है कि स्कूलों में परामर्श प्रदान किया जाना चाहिए?

i. Yes

ii. No

iii. Don’t know

8. I am doing a research to know the stressful problems students go through and if a counsellor could help with those. Would it be okay if I call you to know more about your child's experiences with school? मैं उन तनावपूर्ण समस्याओं के बारे में जानने के लिए एक शोध कर रहा हूं जो छात्रों को होती हैं और यदि कोई काउंसलर उन लोगों की मदद कर सकता है। क्या यह ठीक होगा यदि मैं आपके बच्चे के अनुभवों के बारे में जानने के लिए कॉल कारू?

i. Yes

ii. No

ANNEXURE 2

CHECKLIST

FOR PARENTS

1. What do you understand by 'mental health of your child'?

   (Probe – when would you say a child is mentally healthy)

2. What are the most common mental health problems in children according to you?

   (*Probe for problems like tension, stress, sadness, depression, anxiety or fearfulness and low confidence, Probe for causes like family problems, love problems, problems with peers, studies, etc.)*

3. How do you think these problems impact the lives of the young persons?

   (Probe for - life at school, at home)

4. How do young persons of your child's age generally deal with such problems?

5. How do you think do the parents generally deal with such problems among their children?

6. What are your thoughts on having a school based mental health program in the school?

   (Probe for anticipated benefits to children

   Probe for anticipated challenges and concerns)

7. Will parents have any concerns about sending a child for counselling in school?

FOR STUDENTS

1. What are your thoughts on having a school based counselling program for mental health problems in your school?

   (Probe regarding benefits and concerns of such a program,

   Probe if students would go to the counsellors themselves to seek help

   Probe for problems that they would like to discuss with the counsellor)

2. What are some of your concerns about counselling in schools?

(Probe for feeling shy or embarrassed or concerned with other students and teachers knowing about them going to the counsellors.)

BIBLIOGRAPHY

Adelman HS, Taylor L, editors. Mental health in schools: Engaging learners, preventing problems, and improving schools. Corwin Press; 2009 Oct 29.

Barrett P, Turner C. Prevention of anxiety symptoms in primary school children: Preliminary results from a universal school-based trial. British journal of clinical psychology. 2001 Nov;40(4):399-410.

Barry MM, Clarke AM, Jenkins R, Patel V. A systematic review of the effectiveness of mental health promotion interventions for young people in low and middle income countries. BMC public health. 2013 Dec;13(1):835.

Baumrind D. The influence of parenting style on adolescent competence and substance use. The journal of early adolescence. 1991 Feb;11(1):56-95.

Chisholm D, Sweeny K, Sheehan P, Rasmussen B, Smit F, Cuijpers P, Saxena S. Scaling-up treatment of depression and anxiety: a global return on investment analysis. The Lancet Psychiatry. 2016 May 1;3(5):415-24.

Draucker CB. Interaction patterns of adolescents with depression and the important adults in their lives. Qualitative Health Research. 2005 Sep;15(7):942-63.

Goldstein S, Brooks RB. Resilience in children. New York: Springer. Gooding, HC, Milliren, CE, Austin, SB, Sheridan, MA, & McLaughlin, KA (2016). Child abuse, resting blood pressure, and blood pressure reactivity to psychological stress. Journal of Pediatric Psychology. 2005;41:5-12.

Honey A, Alchin S, Hancock N. Promoting mental health and wellbeing for a young person with a mental illness: Parent occupations. Australian occupational therapy journal. 2014 Jun;61(3):194-203.

Honey A, Fraser V, Llewellyn G, Hazell P, Clarke S. Parental influence on the mental health-related behaviour of young people with mental illness: Young people's perceptions. Advances in Mental Health. 2013 Oct 1;12(1):63-74.

Kapur M. An integrated approach to the delivery of child mental health services. Journal of Indian Association for Child and Adolescent Mental Health. 2005;1(1):4.

Kern L, Mathur SR, Albrecht SF, Poland S, Rozalski M, Skiba RJ. The need for school-based mental health services and recommendations for implementation. School Mental Health. 2017 Sep 1;9(3):205-17.

Kessler RC, Amminger GP, Aguilar-Gaxiola S, Alonso J, Lee S, Ustun TB. Age of onset of mental disorders: a review of recent literature. Current opinion in psychiatry. 2007 Jul;20(4):359.

Kessler RC, Sonnega A, Bromet E, Hughes M, Nelson CB. Posttraumatic stress disorder in the National Comorbidity Survey. Archives of general psychiatry. 1995 Dec 1;52(12):1048-60

Kumar D, Bharath S, Hirisave U, Agarwal S, Shah H, Weist MD, Kutcher S, Wei Y. School mental health programs in India. School Mental Health: Global Challenges and Opportunities. 2015 May 5:99-104.

Maccoby E, Martin JA. Socialization in the context of family: Parent-child interaction. EM Hetherington ve PH Mussen,(Ed.), Handbook of child psychology: Socialization, personality, and social development (4. baskı) içinde (1-101).

McElhaney KB, Porter MR, Thompson LW, Allen JP. Apples and oranges: Divergent meanings of parents' and adolescents' perceptions of parental influence. The Journal of early adolescence. 2008 May;28(2):206-29.

Meadows GN, Burgess PM. Perceived need for mental health care: findings from the 2007 Australian Survey of Mental Health and Wellbeing. Australian and New Zealand Journal of Psychiatry. 2009 Jan 1;43(7):624-34.

Nikolaou E, Markogiannakis G. The role of teacher in primary school students' mental health promotion. Global Journal of Human-Social Science. 2017.

Patel V, Flisher AJ, Hetrick S, McGorry P. Mental health of young people: a global public-health challenge. The Lancet. 2007 Apr 14;369(9569):1302-13.

Rivet-Duval E, Heriot S, Hunt C. Preventing adolescent depression in Mauritius: A universal school-based program. Child and Adolescent Mental Health. 2011 May;16(2):86-91.

Reddy R, Rhodes JE, Mulhall P. The influence of teacher support on student adjustment in the middle school years: A latent growth curve study. Development and psychopathology. 2003 Mar;15(1):119-38.

Rones M, Hoagwood K. School-based mental health services: A research review. Clinical child and family psychology review. 2000 Dec 1;3(4):223-41.

Rorty M, Yager J, Rossotto E. Why and how do women recover from bulimia nervosa? The subjective appraisals of forty women recovered for a year or more. International Journal of Eating Disorders. 1993 Nov;14(3):249-60.

Sagar R, Dandona R, Gururaj G, Dhaliwal RS, Singh A, Ferrari A, Dua T, Ganguli A, Varghese M, Chakma JK, Kumar GA. The burden of mental disorders across the states of India: the Global Burden of Disease Study 1990–2017. The Lancet Psychiatry. 2020 Feb 1;7(2):148-61.

Shastri PC. Promotion and prevention in child mental health. Indian Journal of Psychiatry. 2009 Apr;51(2):88.

Toumbourou JW, Stockwell T, Neighbors C, Marlatt GA, Sturge J, Rehm J. Interventions to reduce harm associated with adolescent substance use. The Lancet. 2007 Apr 21;369(9570):1391-401.

Vidourek RA, Burbage M. Positive mental health and mental health stigma: A qualitative study assessing student attitudes. Mental Health & Prevention. 2019 Mar 1;13:1-6.

Vijayakumar L, John S, Pirkis J, Whiteford H. Suicide in developing countries (2) risk factors. Crisis. 2005 Jan;26(3):112-9.

Weist MD, Evans SW. Expanded school mental health: Challenges and opportunities in an emerging field. Journal of Youth and Adolescence. 2005 Feb 1;34(1):3-6.

Wilson CJ, Rickwood DJ, Bushnell JA, Caputi P, Thomas SJ. The effects of need for autonomy and preference for seeking help from informal sources on emerging adults' intentions to access mental health services for common mental disorders and suicidal thoughts. Advances in Mental Health. 2011 Oct 1;10(1):29-38.

Wong LP. Data analysis in qualitative research: A brief guide to using NVivo. Malaysian family physician: the official journal of the Academy of Family Physicians of Malaysia. 2008;3(1):14.

World Health Organization. Investing in mental health. World Health Organization; 2003.

Zivetz L. The ICD-10 Classification of Mental and Behavioural Disorders: Clinical Descriptions and Diagnostic Guidelines. World Health Organization; 1992.

PART II

COURSE: ESSENTIALS OF GLOBAL HEALTH

AIM OF COURSE: To write learnings of the online course of Essentials of Global Health.

COURSE DESCRIPTION: Essentials of Global Health course is an in-depth information about global health. The topics are taught in a concise, methodical and comprehensible way. Five main questions are answered through this course: "What do people get sick, disabled and die from; Why do they suffer from these conditions? Which people are most affected? Why should we care about such concerns? What can be done to address key health issues, hopefully at least cost, as fast as possible, and in sustainable ways?" Though it is universal in consideration, but special attention is given to low- and middle-income countries, the health of the poor, and health inequalities. In this course special focus is given to problems in the health systems, relationship between health and development, and health issues pertaining to global interdependence.

OBJECTIVES OF COURSE:

• To articulate the main public health notions associated with global health

•To analyze the main global health problems from different view points

• To discuss the burden of disease in different regions of the world; its variation by sex, age, and location; its main risk factors; and addressing the disease burden in a cost-effective manner

• To assess the main health disparities

• To outline the main actors and organizations in global health and the way in which they work together to tackle the global health issues

• To review the main global health challenges that are expected to appear in the coming time.

COURSE CONTENT:

Module 1: Introduction

It tells us about the course, some basic global health concepts and different perspectives for considering global health problems. It talks about the main actors and organizations in global health and the way in which they work together to address the global health issues.

Module 2: The Burden of Disease

It tells us about the "burden of disease". It first talks about the state of the world's health and then introduces the key demographic factors and their relation to global health. It finally tells us how people get sick, disabled and die from and their risk factors and determinants.

Module 3: Health Systems and Value for Money in Health

It focuses on health systems. It first examines the notion of "value for money" for investments in health and then examines the health system around the globe and the ways to spend money in health in a cost-effective way.

Module 4: Cross-Cutting Themes in Global Health

It focuses on some of the most crucial cross-cutting themes in global health, which include the relationship of health with environment, complex humanitarian emergencies, natural disasters and nutrition. It also talks about women, child and adolescent health.

Module 5: Critical Causes of Illness and Death

It focuses on main causes of illness, disability, and death. It talks about communicable diseases, like emerging infectious diseases, HIV, TB, malaria, and the neglected tropical diseases and non-communicable diseases, like heart disease, stroke, cancer, and diabetes. It also talks about injuries and mental health disorders.

Module 6: Looking Forward

It focuses on the main global health challenges that are expected to appear in the coming time and how science and technology can be used to solve these problems.

LEARNING METHODOLOGY USED IN COURSE: The course was taught through videos, research papers and a book, Global Health 101. Quizzes were taken on regular intervals to test our knowledge.

LEARNINGS FROM THE COURSE:

MODULE 1: INTRODUCTION TO GLOBAL HEALTH

Global Health

It is study, research and practice that takes into account health of people across the globe. Its main focus is to improve health while also providing equity in health for all the people. This is possible through global cooperation.

Determinants of health-

The determinants influence at three levels:

1) Individual characteristic- genetic makeup, sex, age
2) Healthy child development, Physical environment, Accessible health services, Healthy behavior , Social environment, cultural environment, working conditions
3) Policies, Interventions, Governance

Social determinants and risk factors

Social determinants are "conditions in which a person is born, grows, works, lives and ages and all the factors that might affect daily life."

Risk factors are "the attribute, characteristics or exposure of an individual that increase the chance of emergence of a disease or injury." Risk factors can be categorized into the following:

1. Unmodifiable risk factors: intrinsic risk factors, that cannot be controlled (eg. Genetic background)
2. Modifiable risk factors: they can be changed (eg. Habit of smoking)

Millennium Development Goals- These are set of 8 measurable goals ranging from eradicating poverty and hunger to promoting gender equality and reducing child mortality by 2015.

Sustainable Development Goals- These are a set of 17 goals for achieving a better and more sustainable future for all. These goals are "No Poverty, Zero Hunger, Good Health and Well-being, Quality Education, Gender Equality, Clean Water and Sanitation, Affordable and Clean Energy, Decent Work and Economic Growth, Industry, Innovation and Infrastructure, Reduced Inequality, Sustainable Cities and Communities, Responsible Consumption and Production, Climate Action, Life Below Water, Life on Land, Peace and Justice Strong Institutions and Partnerships to achieve the Goal."

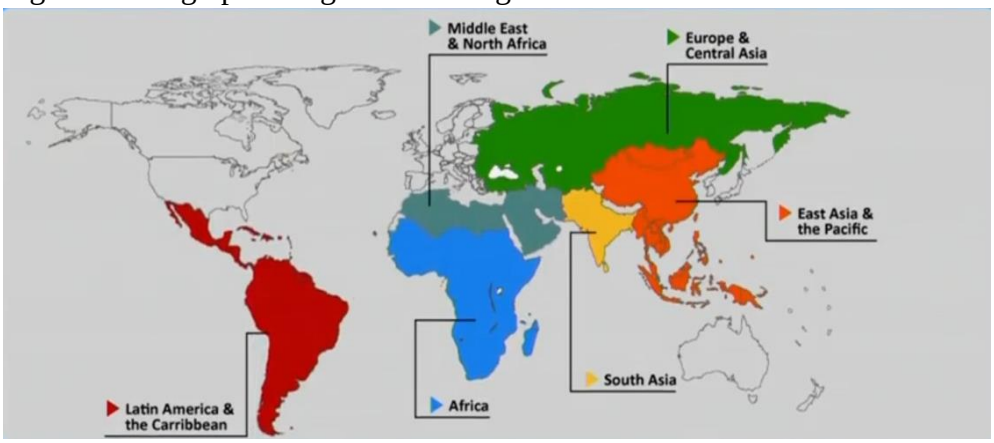
Few of the key actors that play an important role in global health:

1) World Health Organization (WHO) - Every country is a part of WHO. It plays several roles, like setting standards, for advocacy and policymaking and also does global health research.
2) United Nations International Children's Emergency Fund (UNICEF) - This organization aims to look after health and well-being of children across the globe. It is involved not only in advocacy, policy work and research but it is also a funding agency for improvement of health of the children and their families in many countries.
3) UNAIDS – it is accountable for all work concerning HIV and AIDS across the globe. It is involved mainly in setting standards, policymaking, advocacy and a little financing for investment of works pertaining to HIV and AIDS.
4) World Bank – It is the largest multilateral development bank. It is owned by its member countries which take money that is raised by rants to them, by sales of bonds, on lend the money and thus trying to help the countries by investing in many activities including health. World Bank is also involved in research work in health, advocacy and working on policy related matters on health.
5) Department for International Development (DFID) – It is a bilateral organization which acts as a development assistance agency for the United Kingdom.

Income Groups and Geographic regions

- Income Groups according to the World Bank: It is based on the per capita incomes of these countries. The income groups are as follows:
    - High income countries
    - High income OECD countries
    - Upper Middle Income countries
    - Lower Middle Income countries
    - Lower Income countries
- Geographic Region :
    - According to World Bank

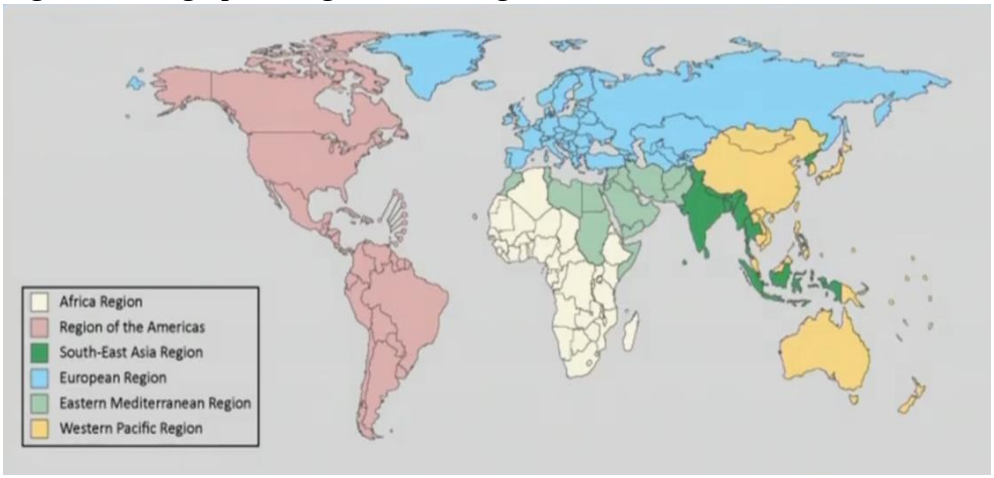
Figure 1: Geographic Region according to World Bank



Source: Yale University (Essentials of Global Health course)

- According to WHO

Figure 2: Geographic Region according to WHO



Source: Yale University (Essentials of Global Health course)

MODULE 2: THE BURDEN OF DISEASE

KEY HEALTH INDICATORS FOR MEASURING PROGRESS IN GLOBAL HEALTH

“Life expectancy at birth is defined as the average number of years a newborn baby could expect to live if current mortality trends were to continue for the rest of the newborn’s life.”

“Maternal mortality ratio is defined as the number of women who die as a result of pregnancy and childbirth complications per 100000 live births in a given year.”

“Neonatal mortality rate is defined as the number of deaths to infant under 28 days of age in a given year per 1000 live births in that year per 1000 live births in that year.”

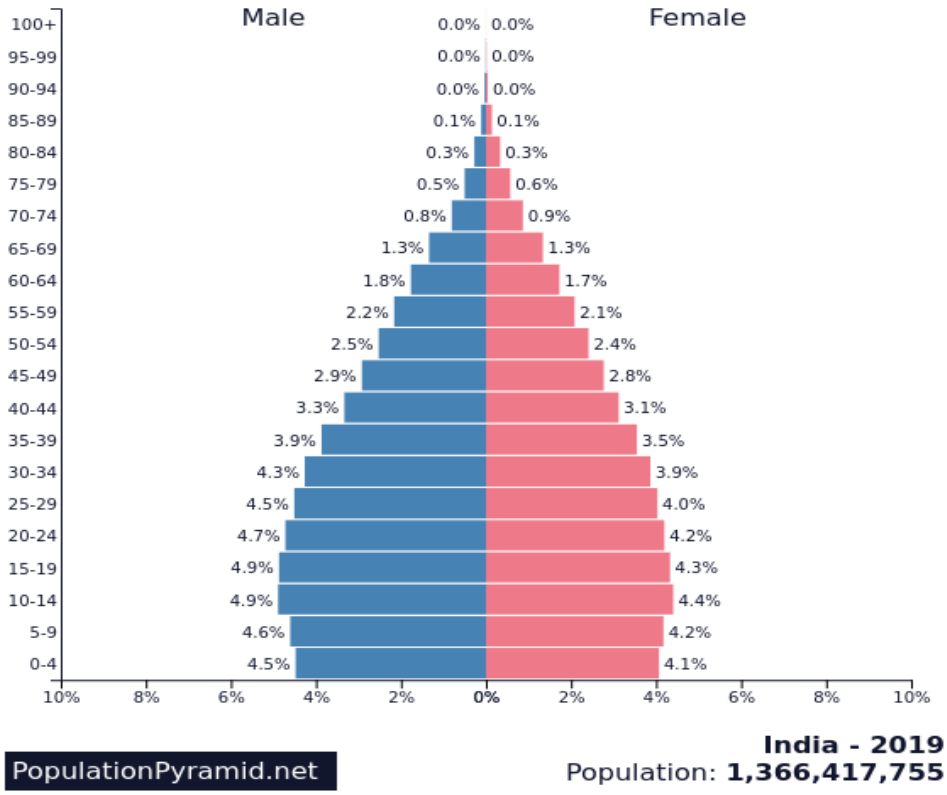
“Infant mortality rate is defined as the number of deaths of infants under age 1 per 1000 live births in a given year.”

“Under 5 mortality rate is defined as the probability that a newborn baby will die before reaching age 5, expressed as a number per 1000 live births.”

Population Pyramid

It graphically depicts a population’s age and sex composition.

Figure 3: Population Pyramid of India

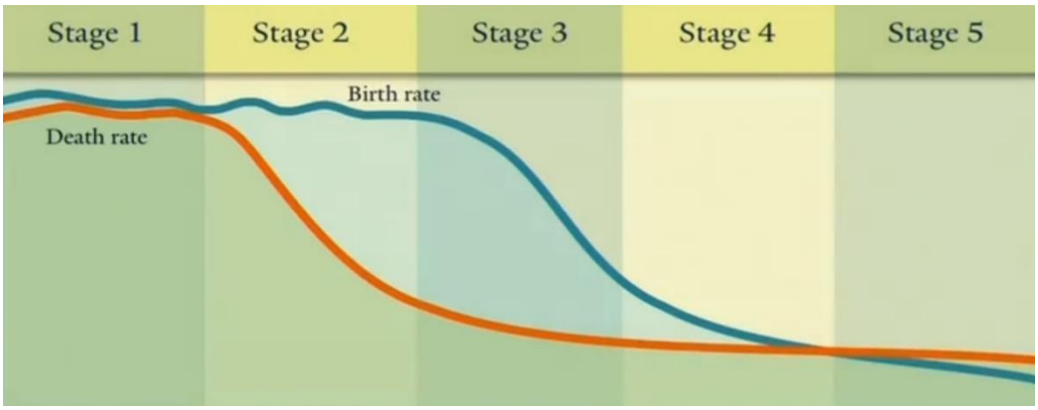


Source: populationpyramid.net

Demographic Transition

It is “the shift from a pattern of high fertility and high mortality to low fertility and low mortality, with population growth occurring in between.”

Figure 4: Demographic Transition Model



Source: populationeducation.org

THE BURDEN OF DISEASE

Years of Life Lost (YLL) are “the difference between age at death and the highest life expectancy globally for that age.”

Years Lived with Disability (YLD) are the “years of life lived with disability multiplied by the weight assigned to the condition.”

Disability adjusted life year (DALY) - One DALY can be thought of as one lost year of "healthy" life.

$$DALY = YLL + YLD$$

The cause of illness and death was grouped into three broad categories during earlier times:

1. Group 1- communicable, maternal, neonatal and nutritional conditions
2. Group 2- non communicable diseases
3. Group 3-injuries

Epidemiological Transition- Transition of disease profile from communicable to non-communicable diseases.

MODULE 3: HEALTH SYSTEMS AND VALUE FOR MONEY IN HEALTH

Value for money in Global Health

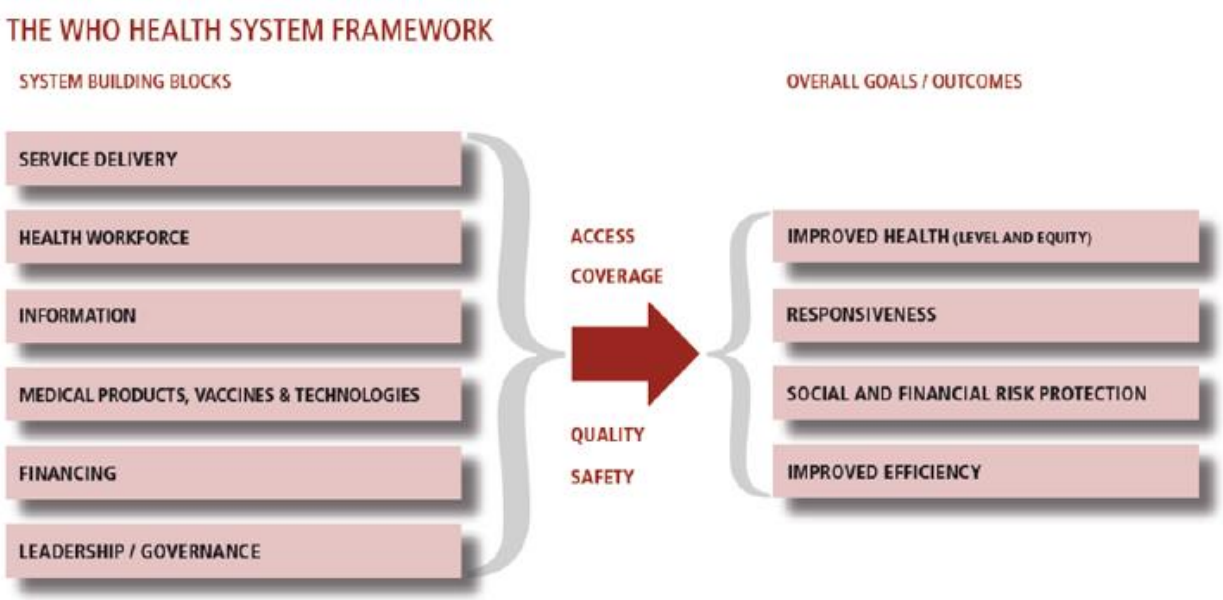
Cost effectiveness analysis in health- It is “a method to compare the costs of investments with the amount of health that can be purchased with that investment.”

Health System

The people, institute and resources that work to provide promotive, curative and restorative healthcare of the people in an efficient and effective way without putting financial burden on the people.

WHO Health Framework

Figure 5: WHO Health System Framework



Source: WHO

Alma Ata and primary care

- Be crucial and socially acceptable
- Evidence based and made universally available
- Community needs addressed and its affordability
- Provide preventive, promotive, curative, rehabilitative services
- The work force who would staff primary healthcare services are receptive to the needs of the community
- Primary healthcare would be associated to the other strata of health services using referral system
- Linked to action on the main health determinants

Ethical priority setting in health

Three main criteria for it are:

1. Cost effectiveness analysis to identify how to use the least resources and get maximum health output.
2. Special priority should be given to the people who are worse off
3. Third is providing financial risk protection.

Conditional cash transfer: cash payments are provided to the poor households if they complete some behavioral requirement related to health. Eg. JSSY- poor women are provided cash benefits if they deliver the child at the hospital.

Universal Health Coverage: providing the promotive, preventive, curative, rehabilitative and palliative health services to all the people without compromising on the quality while also proving financial risk protection.

MODULE 4: CROSS CUTTING THEMES IN HEALTH

1) HEALTH DISPARITIES

Equity refers to "fairness about achieving health, capability to achieving good health and fair distribution of healthcare".

Inequality refers to "difference in health status or in distribution of health determinants between different population groups" (WHO, 2014).

Health disparities refers to "disparity in health due to social or economic reasons "(CDC, 2014).

Key determinants associated with Health disparities:

- Social and economic standing
- Health status and disability of person
- Ethnicity
- Gender
- Religion
- Location
- Profession
- Social capital

2) ENVIRONMENT, CLIMATE CHANGE AND HEALTH

As per WHO 2015, "Environmental Health consists of facets of human health, encompassing life quality, which are affected by the physical, chemical, biological, social and psychosocial factors in the environment. It further points to the theoretical and practical aspect of evaluating, amending, managing, and intercepting these elements in the environment that can possibly adversely influence the health of present as well as future generations."

Main Environmental risk factors:

- Unimproved water
- Lead
- Household air pollution
- Ambient air pollution

- Poor sanitation

Climate change is the elevation of average temperature of the earth and its consequences. E.g. variable rainfall and its impact on hygiene and agriculture

In short term the impact of climate change on health can be mitigated by enhancing public health education, improving emergency preparedness, and engaging in warnings about pollution whereas long term efforts might include reduction of emission of greenhouse gases.

3) NUTRITION AND GLOBAL HEALTH

According to Skolnik 2015, the four important indexes to measure nutritional status for infants and children are:

i. Birthweight: "it will be considered low if the child's weight at birth is less than 2500 gm"
ii. Height-for-age : "a child is regarded as stunted if the height-for-age is 2 z-score or more below the median of its international reference"
iii. Weight-for-age : "a child is considered underweight if the weight-for-age is 2 z-score or more below the median of its international reference"
iv. Weight-for-height : "a child is considered wasted if the weight (in kg), divided by height (in meters squared), is more than 2 z-score beneath the median of its global reference"

The main reasons of malnutrition as found by Skolnik 2015 are:

Table 1: Main causes of malnutrition as found by Skolnik 2015

CAUSES	UNDERLYING CAUSES	BASIC CAUSES
Availability of food and it's utilization	Insufficient access to food	Lacking education
Prevention of diseases	Poor quality of health services and environment	Resources and control
Maternal care and child care quality	Care for children and women is not adequate	Political / economic factors/ structures

Types of nutritional interventions as suggested by Skolnik 2015:

i. Nutrition specific interventions: they have a direct impact on nutrition. Example. Food fortification
ii. Nutrition sensitive intervention: they point out the basic determinants of malnutrition. Example. Vaccination program
iii. Enabling environment for nutrition interventions: it addresses the laws, policies, resources and institutional issue and the effectiveness of countries in formulating, implementing and monitoring nutrition interventions. Example. Taxation of sweetened beverages

Main steps that can be taken to address undernutrition

i. Growth monitoring and promotion
ii. Keeping infection low
iii. Food supplements
iv. Vitamin and mineral supplementation
v. Food fortification

Main steps to address overweight and obesity

i. Setting nutrition and activity standards
ii. Setting national dietary guidelines
iii. Aligning nutrition goals with agricultural policy
iv. Establishing nutrition labeling
v. Incentivizing healthier eating choices
vi. Enacting legislation to restrict food marketing for children
vii. Enabling healthy school food environments
viii. Improving safety of and access to recreational spaces
ix. Providing more appropriate physician attention to obesity and overweight

4) WOMEN'S HEALTH

Women's health is important because:

i. Women are victims of prejudice
ii. They encounter various unique difficulties
iii. There is a vast difference in the health of men and women without any justification
iv. Many deaths and DALYs can be avoided by the existing low cost interventions
v. Spending on the education and health of women causes social and economic development

Table 2: Leading causes of deaths for females, low and middle income countries and high income countries, 2017

	LOW AND MIDDLE INCOME COUNTRIES	HIGH INCOME COUNTRIES
1)	Ischemic heart disease	Ischemic heart disease
2)	Stroke	Alzheimer's disease
3)	Diarrheal disease	Stroke
4)	COPD	Lung cancer
5)	Lower respiratory infection	COPD
6)	Neonatal disorders	Lower respiratory infection
7)	Diabetes	Breast cancer
8)	Tuberculosis	Colorectal cancer
9)	Alzheimer's disease	Chronic kidney disease
10)	Chronic kidney disease	Diabetes

Source: GBD Compare/IHME Viz Hub

Table 3: Leading causes of DALY for females, low and middle income countries and high income countries, 2017

	LOW AND MIDDLE INCOME COUNTRIES	HIGH INCOME COUNTRIES
1)	Neonatal disorders	Low back pain
2)	Lower respiratory infection	Ischemic heart disease
3)	Ischemic heart disease	Stroke
4)	Diarrheal disease	Alzheimer's disease
5)	Stroke	Headache disorder
6)	COPD	COPD
7)	Congenital defects	Diabetes
8)	Diabetes	Depressive disorders
9)	Headache disorder	Breast cancer
10)	HIV/AIDS	Lung cancer

Source: GBD Compare/IHME Viz Hub

Addressing key social determinants:

i. Appropriate quality universal schooling should be enhanced for all girls, at least through secondary school
ii. Implementation of policies should be there which enhance the status of women and reduce discrimination against them
iii. Modern sector employment should be increased for women

5) CHILD HEALTH

Table 4: Leading causes of Under-five deaths, low and middle income countries and high income countries, 2017

	LOW AND MIDDLE INCOME COUNTRIES	HIGH INCOME COUNTRIES
1)	Neonatal disorders	Neonatal disorders
2)	Lower respiratory infection	Congenital defects
3)	Diarrheal diseases	Sudden Infant Death Syndrome(SIDS)
4)	Congenital defects	Foreign bodies
5)	Malaria	Lower respiratory infection
6)	Meningitis	Road injuries
7)	Protein energy malnutrition	Endocrine/metabolic/blood/immune system problems
8)	Sexually Transmitted infection	Interpersonal violence
9)	Measles	Drowning
10)	Whooping cough	Diarrheal diseases

Source: GBD Compare/IHME Viz Hub

Table 5: Leading risk factors of Under-five deaths, low and middle income countries and high income countries, 2017

	LOW AND MIDDLE INCOME COUNTRIES	HIGH INCOME COUNTRIES
1)	Short gestation for birth weight	Short gestation for birth weight
2)	Low birth weight for gestation	Low birth weight for gestation
3)	Child wasting	Child wasting
4)	Unsafe water source	Non-exclusive breastfeeding
5)	Child underweight	Ambient particulate matter pollution
6)	No access to handwashing facility	Secondhand smoke
7)	Unsafe sanitation	Impaired kidney function
8)	Child stunting	Vitamin A deficiency
9)	Vitamin A deficiency	Child underweight
10)	Household air pollution from solid fuels	Child stunting

Source: GBD Compare/IHME Viz Hub

Table 6: Critical interventions for the newborn care

Essential newborn care	Extra care for newborn babies	Emergency care
Early and exclusive breast feeding	Additional attention regarding warmth, feeding support, infection prevention and skin care	Giving supportive care for serious infections
Child should be kept warm and bath should be avoided for the first 24 hours	Early identification and management of complications	Giving supportive care for neonatal brain disease
Infection control, including cord care and hygiene	Kangaroo mother care	Giving supportive care for severe jaundice and bleeding
Mothers should be given postnatal Vitamin A	Vitamin K injection	Giving supportive care for seizure management
Eye antimicrobial should be given to avoid opthalmia, inflammation of the eye or conjunctiva	Monitored safe oxygen use	Giving supportive care for respiratory distress syndrome
Instructions and counselling for home care and emergency readiness		Giving supportive care for neonatal tetanus
Neonatal resuscitation incase the child is not breathing at birth		

6) CHILDHOOD IMMUNIZATION

Its main benefits are:

i. Providing benefits to those who are immunized and through herd immunity to those who are not
ii. Preventing diseases which are often treated with antibiotics, thereby reducing the risk of developing anti-microbial resistance
iii. Helping to keep people healthy, thereby promoting economic growth and poverty reduction and allowing children to become productive adults
iv. Saving families from the direct and indirect costs of vaccine preventable childhood diseases

7) ADOLESCENT HEALTH

Most common issues affecting adolescents are:

i. Early pregnancy and childbirth
ii. HIV and STD
iii. Other Communicable Diseases
iv. NCDs
v. Mental health
vi. Violence
vii. Road injuries

Measures to improve adolescent health:

i. Focusing on social determinants
ii. Reducing the risks of auto injuries to adolescents
iii. Taking life course perspective
iv. Reducing barriers to access to health services through universal health coverage and making services more adolescent friendly
v. Focusing on reproductive health, such as delaying age at marriage and first birth and promoting family planning
vi. Focusing more broadly on key burdens and their risks such as nutrition, immunization, HIV, tobacco and substance abuse, mental health, physical activity and road injuries

8) COMPLEX HUMANITARIAN EMERGENCIES

Disaster as stated by National Highway Traffic Safety Administration is "any occurrence that causes damage, ecological destruction, loss of human lives, or deterioration of health and health services on a scale sufficient to warrant an extraordinary response from outside the affiliated area."

Complex humanitarian emergency as stated by Boutros Boutros Ghali is "a complex, multiparty, intra-state conflict resulting in a humanitarian disaster which might constitute multi-dimensional risks or threats to regional and international security."

Drought, Earthquakes, Tsunamis, Hurricanes, typhoons, cyclones and Volcanoes are some common natural disasters.

Standards have been set to respond to these disasters like code of conduct and standards by International Red Cross for the provision of services like when setting up a refugee camp, how much food per day do people need? The quantity of water per day people need?

MODULE 5: CRITICAL CAUSES OF ILLNESS AND DEATH

Infectious Disease

Selected measures to address the emerging and re-emerging infectious diseases :

i. Improve land use planning within the countries
ii. Enhance public education about these diseases
iii. Establish country wise surveillance systems and public health laboratories
iv. Share information across countries concerning disease outbreaks in a well timed way
v. Strengthen implementation of the International Health Regulations
vi. Enhance the capacity for a coordinated and timely global response
vii. Improve the financing for such a response

Selected measures to address anti-microbial resistance :

i. The economic burdens of drug resistance should be studied
ii. An international surveillance system needs to be established to study resistance
iii. Improved regulation and severe monitoring of prescription system of antibiotics
iv. Public should be made aware of the dangers of excess use of antibiotics
v. Antibiotics use should be discontinued in animal husbandry
vi. New models of research and development on antibiotics need to be made
vii. Better governance of antibiotics, both nationally as well as internationally.

HIV

Routes of HIV transmission

i. Unprotected sexual intercourse
ii. Transmission through mother to child, during birth or by breast feeding
iii. Blood, via transfusion, needle sharing or accidental needle sharing
iv. Transplantation or infected tissue or organs

Main consequences of HIV

i. A compromised immune system, related diseases and death
ii. Maternal to child transmission
iii. The creation of orphans
iv. Social stigma
v. The direct cost of treatment
vi. Economic losses to individuals and families
vii. Possible larger effects on the overall economy

Steps taken by countries which successfully address HIV

i. Maintained political leadership at the topmost level
ii. Participation of a wide range of civil society efforts to tackle HIV/AIDS
iii. Wide range of programs to change social practices in the community
iv. Open communication regarding HIV/AIDS and associated sexual problems
v. Programs to decrease stigma and discrimination

Evidence based practices to address HIV

i. Proper epidemic surveillance
ii. Information, education and communication
iii. Voluntary counseling and testing
iv. Promoting condom usage
v. Screening and treatment for STIs (sexually transmitted infections)
vi. Preventing mother-to-child transmission via antiretroviral treatment and avoidance of pregnancy
vii. Prevention of blood borne transmission by blood safety, reducing harm for injecting drug users and universal precautions

TUBERCULOSIS

Three important ways to reduce HIV-TB Co-infection:

i. Infection control-by increasing infection control in healthcare setting in order to stop the spread of TB to those with HIV
ii. Isoniazid- providing isoniazid to people infected with HIV so as to help prevent their risks of HIV
iii. Intensified case finding- it is used to confirm that all of those who are HIV- positive are tested for TB and all those with TB are tested for HIV

MALARIA

Key malaria interventions:

i. Instant treatment of infected people on the basis of their confirmed diagnosis
ii. Intermittent preventive therapy for pregnant women
iii. Long lasting insecticide treated bed nets for the people in malarial zones
iv. Indoor residual spraying in homes of people in malarial zones

Key challenges to malaria control:

i. Scaling up key interventions
ii. Treating on the basis of confirmed diagnosis
iii. More rapid and appropriate treatment
iv. The role of the private sector
v. Continuing progress in diagnosis and treatment
vi. Dealing with resistance
vii. Development of a safe and effective vaccine

NEGLECTED TROPICAL DISEASE

WHO classifies 17 diseases as neglected tropical diseases, i.e, "Buruli ulcer, Chagas disease, Dengue and Chikungunya, Dracunculiasis (guinea-worn disease), Echinococcosis, Endemic treponematoses (Yaws), Foodborne trematodiases, Huma African trypanosomiasis (sleeping sickness), Leishmaniasis, Leprosy (Hansen disease), Lymphatic filariasis, Onchocerciasis (river blindness), Rabies, Schistosomiasis, Soil transmitted helminthiases, Taeniasis/ Cysticercosis, Trachoma."

NON-COMMUNICABLE DISEASES

Some policy measures for Global NCD Action Plan

For Tobacco use:

i. Reduce affordability by raising tobacco excise taxes
ii. Developing no-smoke areas
iii. Ban advertising and promotion
iv. Promote cessations

For harmful use of alcohol:

i. Reduce affordability by increasing alcohol excise taxes
ii. Restrict sale hours
iii. Restrict sales to minors

For physical inactivity and unhealthy diet

i. Decreasing the salt intake
ii. Consuming unsaturated fats
iii. Implementation of public awareness programs on diet and physical activity

For cancer:

i. Liver cancer can be prevented by Hepatitis B immunization
ii. Cervical cancer can be prevented by it's screening

For cardiovascular disease and Diabetes:

i. Drug therapy and counselling to high risk individuals
ii. Aspirin for heart attack

CANCER

Leading risk factors by cancer type:

i. Breast cancer:
    - Genetic susceptibility
    - Radiation subjection
    - Alcohol

- Obesity (post-menopausal)

ii. Cervical cancer:
- Human Papilloma Virus (HPV)

iii. Colorectal cancer:
- Diets containing high amounts of red meat and low in fiber
- Alcohol (men)

iv. Liver cancer:
- Hepatitis B virus
- Hepatitis C virus
- Schistosomiasis
- Alcohol

v. Lung cancer:
- Tobacco use
- Asbestos exposure
- Air pollution

vi. Pancreatic cancer:
- Alcohol
- Obesity

vii. Skin cancer
- UVA/UVB exposure

Proposed cancer intervention package for LMICs:

i. All cancers
- Education on risks of tobacco, importance of HPV and HBV vaccination, and to teach about the value of taking early treatment for common cancers
- Palliative care is also necessary, including, at least opioids for pain relief

ii. Selected tobacco relate cancers:
- Taxation; caution labels ; banning public smoking, advertising, and promotion and monitoring
- Discontinuing counsel and services, mostly without pharmacological therapies

iii. Breast cancer:
- Early stage cancers need to be treated with curative goal

iv. Cervical cancer:
- School based HPV vaccination
- Opportunistic screening should be done and precancerous lesions should be treated
- Treatment of precancerous lesions
- Treating early stage cancer

v. Colorectal cancer:
- Emergency surgery for obstruction
- Early stage cancers need to be treated with curative goal

vi. Liver cancer:

- Hepatitis B vaccination (including birth dose)

vii. Childhood cancers:

- Selected early stage cancer need to be treated with curative intent in pediatric cancer units/ hospitals

DIABETES

Type I Diabetes is "an autoimmune disorder that attacks and destroys the insulin producing cells in pancreas." It usually starts before the age of 30 years.

Type II Diabetes is "a disease people do not make enough insulin or their bodies do not efficiently use the insulin they make."

Important measures to address Diabetes:

i. Avoid being overweight
ii. Promote healthier eating
iii. Promote physical activity
iv. Treat with insulin
v. Control hypertension
vi. Provide appropriate foot care

TOBACCO AND ALCOHOL

World Health Organisation launched Mpower Program in 2013 to control Tobacco use. It uses the following guidelines to help reduce its consumption:

i. Scanning tobacco usage and prevention policies
ii. Help should be given to people to help stop tobacco consumption
iii. Warn about the harmful effects of tobacco
iv. Increase taxes on tobacco

As per Rehm et al in Disease control priorities I developing countries High risk drinking refers to "drinking 20 grams or more per day of pure alcohol for a woman and 40 grams a day for a man."

The major health impacts of high risk drinking are:

i. Increases risk of hypertension, liver damage, pancreatic damage, hormonal problems, and heart diseases
ii. Alcohol intoxication and accidents, injuries, accidental deaths and risky behavior
iii. Alcohol dependence and negative psychological and physical consequences

Some important steps to reduce alcohol consumption among people:

i. Increasing taxes and then reducing availability and sales both generally and to minors.
ii. Checking sobriety of drivers and later involving short counselling sessions with people who engage in excessive alcohol consumption.

iii. Countries can ban the sales and drinking in public places.

MENTAL HEALTH

Common mental health problems include unipolar depressive disorders, anxiety disorders, behavioural affective disorder, and schizophrenia. It also includes substance use disorder and drug use disorder. In includes behavioral disorders such as conduct disorder and eating disorders.

Potential interventions package for mental disorders in LMICs according to WHO (2008):

- Childhood mental disorders:
    i. Better maternal nutrition and care will help prevent such disorders partly
    ii. Children should be treated appropriately pharmacologically
    iii. They should be offered psychological support
- Depression:
    i. Anti-depressant medicines should be used for treatment
    ii. Psychosocial support should also be provided
- Schizophrenia and other psychotic disorders:
    i. Anti- psychotic medicines should be used for treatment
    ii. Family or community based psychosocial support should be provided

Selected policy measures to address mental health disorders in LMICs according to Patel V (2014):

i. Financial resources needs shifting from large mental hospitals to community based approaches
ii. Primary care physicians and staff working there should be trained on how to treat the mentally ill
iii. Protocols should be circulated among the health workers to brief them about behavioral and cognitive therapies
iv. The availability of modern generic drugs need to be increased

INJURIES

According to National Highway Traffic Safety Administration (2006) injury is "the result of an act that damages, harms or hurts; unintentional or intentional damage to the body resulting from acute exposure to thermal, mechanical, electrical or chemical energy or from the absence of such essentials as heat or oxygen".

According to D.T. Jamison et al defines Unintentional injury as "the subset of injuries for which there is no evidence of predetermined intent".

The largest causes of unintentional injuries are:

i. Road injuries
ii. Poisoning
iii. Falls

iv. Fires
v. Drownings

Few risk factors and determinants for unintentional injuries:

i. Falls
   - Young people: physical activities and varies with socioeconomic status
   - Old people: age and overall physical condition
ii. Burns
   - Low income
   - Living in crowded area
   - Living in rural area
   - Young children
iii. Drownings
   - Males
   - Young children
   - Low income countries: daily activities
   - High income countries: recreational activities
   - Poor and large families
iv. Poisonings
   - Young boys under 5 years
   - Young girls 5-14 years
   - Nonstandard containers for poisonous goods in reach of children
   - Lower income parents
v. Road traffic injuries:
   - Rising use of motor vehicles in LMICs
   - Two wheeled vehicles
   - Limited use of seatbelts and motorcycle helmets

MODULE 6: LOOKING FORWARD

HEALTH IMPACT ASSESSMENTS

According to WHO, it is "a combination of procedures, methods and tools by which a policy, program or project may be judged as to its potential effects on the health of a population and the distribution of those effects within the population."

KEY CHALLENGES IN GLOBAL HEALTH:

- Completing the unfinished agenda that relates to undernutrition, child health, maternal health and communicable diseases
- Addressing the growing burden of non-communicable diseases
- Making health systems work more effectively and efficiently and for the poor
- Working collectively to prevent and respond to emerging and reemerging infectious diseases and anti-microbial resistance

- Working collectively to enable the development of the drugs, diagnostics and vaccines needed to address the unfinished and emerging agendas