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### SUICIDE AMONG DOCTORS--A FORESIGHT FOR FUTURE

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### ABSTRACT

Suicide is the act of intentionally leads one's own death. Para suicide is apparent attempted suicides without the actual intention of killing oneself. Doctors who commit suicide don't want to die, but to end their pain. World's largest numbers of doctors are in India. Medical profession is considered as more stressful, but mental health is still a subject of taboo in medical profession in Indian context. Doctors have higher suicide risk, 2.5 times more than the general population. The stress starts in medical school and continues in residency with the high demands, competitiveness, long hours, and lack of sleep. This may contribute to substance abuse, another risk factor for suicide. This high stress is made worse by dwindling healthcare resources and residency positions. Openly discussing suicide as an illness helps to "bring it out of the darkness" and shed the stigma shadowing this problem.

years 2011 and 2015.(5)

to teachers.(7)

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### INTRODUCTION

Studies report that physicians are more likely to die by suicide than the general population and even people with similar academic training who are not physicians (1)

Female physicians are at higher risk of attempting suicide than men (2) India has one of the largest numbers of doctors in the world. It is estimated that more than 1 million doctors are in India.(3)

The new medical curriculum like the earlier has not incorporated single skill in psychiatry as mandatory in examinations for MBBS graduates to become doctors in India.(4)

This adversely affects mental health awareness among budding

doctors. Medical profession is considered as more stressful,

In China, 51 doctors committed suicide between the years 2008 and 2016.(6) It is important to consider these factors in Indian scenario; because doctors as human beings are not immune from mental health issues or suicide. As an occupation, doctors have 80% lower risk of suicide compared to other occupation such as farmers but higher risk compared

but mental health issues continue to be a subject of taboo in

medical profession in the Indian context. Doctors have higher

suicide risk, 2.5 times more than the general population. In the

United Kingdom, 430 doctors committed suicide between the

However, suicidal ideation among medical students is high and ranges from 1.8% to 53.6%.(8) Some of the issues that increase the risk for doctors are substance use, poor coping

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skills, burnout, financial debts, litigations, and perceived stigma associated with seeking help (9,10) Considering the vulnerability of the profession, some countries have annual assessment and report from the medical trainees and trainers on many issues including mental health.(11)

The mental health issue of doctors also has been taken up at annual international practitioner health summit conference; in the year 2018 at London, with the theme was "The wounded healer." (12)

Suicide is stigmatized and gives rise to discrimination against those who survive suicide attempts.(13) An online cross-sectional survey among medical trainees in Australia found that suicide had the second highest stigma rating among various health conditions and was more stigmatized than depression. Suicide also recorded the highest frequency of respondents reporting that they would hide their condition, suggesting that stigma is a major barrier for treatment (14)

Medical undergraduates hold ambivalent attitude toward suicide (15) Exposure to clinical psychiatry helps change such attitudes in some countries, but not in others (16)

Fortunately, attitudes may be changing as some samples show favorable attitudes toward those who survive suicide, use of antidepressants to prevent suicide, and psychosocial/clinical care. Female students generally are more supportive of empathic care for those who survive suicide attempts(17)

A study among medical students at a university in Cameroon reported that some of the major barriers to service utilization were inability to pay for services, lack of awareness about health services, lack of mental health literacy, staff attitudes, and difficulty in accessing services (18)

In addition, stigma and discrimination, fear of impact on academic performance, and concern about confidentiality were further barriers to seeking treatment for Indian students. As in other countries, keenness for self-diagnosis and preference for informal consultations also constituted barriers for uptake of services in India (19)

The Medical Council of India has prescribed a new competency-based syllabus for MBBS, implemented since 2019 which gives reasonable weight age to psychiatry (20)

### Causes of suicide

Multiple causes for suicides in the medical profession were observed at both personal and professional levels. Most important reason being Stress at the workplace. In most districts of India due to the lack of adequate hospital supplies and infrastructure doctors have to struggle to provide the best care with limited resources. Various specific reasons for suicidal deaths among Health Care Professionals include knowledge of lethal methods, easy access to potentially lethal drugs especially causing painless death, apathy, and fearlessness for death due to regular work in life— death situations (21)

Doctors across many specialties often work under tremendous amounts of pressure from patients, managers, their own professionalism, structural factors etc. Many studies have shown that rates of psychiatric disorders and mental ill-health especially depression, anxiety, and suicide are much higher than expected in doctors. (22)

Substance abuse and self-medication are common and doctors are reluctant to seek help from professionals due to many reasons like; First and foremost being stigma against mental illness. Second, a perception of doctors as seeking help is a sign of inefficiency as professionals and should be able to look after themselves and also in many work settings, there are no formal processes to seek help, doctors are worried about issues of confidentiality and subsequent involvement of regulatory bodies (23)

### The reasons for suicide

First, personal reasons including psychiatric disorders lacking support in the workplace and increasing demands contributing to stress and distress. Also includes exposure to trauma, and peer relationships with a lack of support often contributing to altered mental state. A lack of sense of control can contribute to these feelings.

The second related to structural reasons, i.e, conditions in which doctors work play a major role which include increased managerialism, access and management of electronic health records, increased 'paperwork' with rushed patient interaction. The third variety is endemic factors like exposure to deaths, trauma and without having access to safe spaces to reinvigorate oneself (24)

Mental disorders are among leading cause of nonfatal disease burden in India with over 197 million people affected of varying severity in 2017, out of which more than 45 million had depressive disorders and another 44 million had anxiety disorders (25)

Doctors as human beings are not immune from mental health issues or suicide. (26) The reasons for suicide among doctors are often related to un treated depression, bipolar disorder, or substance misuse (27)

**Depression in Medical Trainees:** Due to anticipated stigma medical students and residents are extremely unlikely to report a history of depression during highly competitive selection interviews or application essays (28)

In some Harassment and belittlement by professors, higherlevel trainees, and nurses contribute to mental distress of students and development of depression (29)

It has been known for almost 150 years that physicians have an increased propensity to die by suicide compared with the general population (30)

### Impact of Covid-19

With the coming of SARS-Cov-2 in 2020 the rates of physician burnout have climbed due to increased emotional demands including increased patient deaths, lack of feelings of control, personal blame for inability to do more for patients, increased work hours, and increased emotional stress within their support system(31)

### The Social Roots of Suicidal risk factor

Specific risk factors include

 Work stress - doctors especially during their residency or while working as a consultant in a hospital generally work longer durations, which may include night shift. This is especially high in doctors working in emergency department. Communication with the family members of the patients in life threatening situations adds to the stress.

- 2. Professional factors The longer duration to complete the course, limited seats in post graduation, late marriage and settlement, poor financial returns, working without leaves, lack of time to take care of family and personal life can make a doctor vulnerable to suicides.
- 3. Medicolegal issues suicides due to medicolegal issues are on rise as doctors are generally poor at managing legal issues and tend to become anxious when faced with it.
- 4. Availability of lethal medication As doctors are aware of methods to commit suicide painlessly with some medication, they tend to act more than general population who are afraid about pain associated to suicidal attempt. The chance of surviving after taking a lethal drug is also minimal
- Lack of awareness- lack of proper awareness about the psychological aspects associated with suicide plays a prime role. This Can prevent or delay to go for help.
  A proper training on suicidal behavior can make difference.
- 6. Addictions- in addition to alcohol and smoking, doctors are more vulnerable to get addicted to opiods, sleeping pills, steroids can make suicidal risk high.
- Poor management skills- in general doctors are poor at managing financial issues, human resources, family issues.
- 8. Pandemic added to the above factors, covid pandemic has burdened the doctor community more than any .long working hours, poor facilities, physical assault by patient relatives, staying away from home, fear of contracting covid

### General factors

- Suffering from a psychiatric disorder like depression, schizophrenia, bipolar illness, insomnia can increase the risk
- 10. Family history and high genetic load of suicidal behavior can add to the risk.

Other factors include relation and family issues, economic reasons

### COVID-19, a new stressor?

Studies have found that COVID-19 and the consequent lockdown increased suicidal and self-harm tendencies among the general populace in the country, but there is no data on how they have affected the mental health of doctors. Significantly, around 42% of doctors The Wire Science polled thought that COVID-19 and the related work stress have suicide rates among doctors. survey conducted between March 28 and April 6,2020 year, 152 doctors responded, about 35% were depressed, 40% had anxiety and 33% were stressed; concerns regarding PPE availability and quality, uncertainties about the extent of support from their institution, long working hours, delayed salaries, unhygienic quarantine facilities, separation from families and several incidents of violence against doctors have added to the existing pressure, and exacerbating the sense of the crisis. Many doctors fear that seeking help could adversely affect their careers and personal lives.

A study conducted among female physicians in the US found that 50% of them believed they had mental illness – but did not seek help. In 2017, SuhasChandran and Kishor M., two psychiatrists with the J.S.S. Medical College and Hospital, Mysore, wrote that too many doctors suffered depression in silence, afraid to seek help because they feared penalties at work and in some cases being judged in their personal lives as well.

Issue of violence against doctors "This just adds to [the stress of] already stressed out doctors who are working in difficult situations with little resources and which they have no control over," Pathare said (32)

The COVID-19 pandemic has taken a toll on people of all walks of life, sparing no segment of society. Long working hours, hostile work environment, the frustration of not being able to save lives, isolation from family members affected the mental health of Health Care Professionals led to suicide in a few instances (33). In India, Health Care Professionals faced a lot of discrimination during the pandemic. There have been instances of violence against doctors due to administrative lapses and landlords refusing to let in those who worked in COVID facilities. Among the medical students and professionals in India, it was found that academic stress was the leading cause of suicides, followed by mental illness and harassment (34)

Stressfully long working hours for graduate interns, postgraduate resident doctors, junior physicians, and nursing professionals; starve for long hours, consume fast food to save time, have sleep deprivation, inadequately rested between duty shifts leads to burn-out and stress (35) significantly impacting on their mental well-being.

High levels of personal expectations and the resulting frustration of being unable to fulfill add to their stress. Moreover Health Care Professionals expected to do research work in a time-limited frame, which is an under acknowledged source of anxiety and stress as they are not immune to mental health problems. (36)

Workplace harassment as ragging, discrimination and nepotism also led to suicides among medical and nursing students and resident trainees. Personal life problems such as marital discord/relationship issues are few prominent causes of suicide among physicians (37)

In the ongoing COVID-19 pandemic, a study from the south Indian state of Karnataka found that Health Care Professionals with frontline COVID duties (doctors, nurses, and hospital assistants) had higher rates of anxiety and depression and reported increased suicidal thoughts as compared to other ancillary medical support staff (pharmacists, radiographers, laboratory technicians). (38)

Warning signs: The American Association of Suicidology Working Group proposed the following warning signs of suicide: hopelessness; rage, anger, revenge-seeking behavior; reckless and risky behavior; increasing alcohol or drug use; social withdrawal; feeling trapped; anxiety and agitation; sleep alterations; dramatic mood changes; and no reason for living or no purpose in life (39,40)

#### Death reports

### Trigger warning: Suicide

Suicide among doctors is a complex, multi-factoral issue that has been plaguing the country for decades now. Studies from across the world indicate that suicide rates among doctors are higher than in the general population. In the two months June July of 2020, nearly ten doctors have reportedly died by suicide in different institutions across the country. Most of them were younger than 30 years. The latest addition to this unfortunate list was MohitSinghla, a research officer in the paediatrics department of the All India Institute of Medical Sciences (AIIMS), New Delhi – the third doctor to have died thus at this hospital in this period.

After six doctors in AIIMS checked into the psychiatric ward for treatment in March 2018, the Indian Medical Association (IMA) told The Hindu that suicide among physicians was a "public health crisis" to be "tackled before it was too late". A study at the Postgraduate Institute of Medical Education and Research, Chandigarh, and published in 2018, concluded that 30% of the 445 doctors who participated were depressed and about 17% had thought about ending their lives.

Suicide rates are high (relative to the general population) in many of India' medical colleges as well, but only a few cases from the more prominent institutions are even reported. ShankulDwivedi, former president of the IMA-Medical Students Network, Madhya Pradesh chapter, said "While the risk may be higher in some institutes because of the work environment, it is a countrywide problem that is not limited to a few institutions" Many personal and systemic factors contribute to this problem.

The SukhdeoThorat committee, set up in 2007 to look into caste discrimination at higher education institutions, found in its report that 85% of Adivasi and Dalit students at AIIMS felt that internal examiners had discriminated against them when awarding grades.

Toxic work environments, long working hours, bad living conditions and violence against doctors are a few of the many challenges resident doctors face.

Senior doctors also attributed suicide among their peers to toxic work environments and violence against doctors (41)

# Andhra Pradesh: 32-year-old doctor found dead at Anakapalli

The body of a 32-year-old doctor KoiladaSivakumar was found in the cellar of his apartment, under suspicious circumstances, at Raghuram Colony under Anakapalli Town Police Station limits on June/26/2022 Based on preliminary investigation, police suspect it to be a case of suicide.

"Don't Harass Innocent Doctors": Dr.Archana Sharma has written in her suicide note. The suicide of a woman doctor in Rajasthan after she was accused of murder, has sent shock waves across the state and triggered protests even in national capital Delhi. Doctors have hit the streets, demanding action against the state police, who filed a murder case against Archana Sharma on basis of complaints from the family of a patient, who died in the private hospital she owned. (42)

He had again proved his merit in one of the toughest medical entrance exams to become a doctor at one of the country's prestigious educational institutions — the All India Institute of

Medical Sciences (AIIMS). However, within two years of his stay at this prestigious institution, on March 3,2012,he hanged himself. The reasons, according to the AIIMS administration, are that he was "depressed", developed "psychiatric" problems because of his inability to cope with the rigorous academic environment combined with his lack of skills in the English language. Anil was 22 years old.

# BalmukundBharti, a Dalit student at AIIMS, committed suicide

BalmukundBharti, a Dalit student at AIIMS, committed suicide in similar fashion, but this coincidence does not end with the date. A son of a Class III employee, a native of village Kundeshwar, Tikamgarhdistrict, Bundelkhand (MP), one of the most backward regions of the country, Balmukund was also a school topper from NavodayaVidyalaya and possessed many certificates of academic excellence, including one from the president of India, before getting admission into AIIMS after proving his merit in its entrance exam.

Public are told that he was also "depressed" and committed suicide by hanging himself in his hostel room due to "his inability to cope up with academic performance" demanded by the institution.(43)

### Doctor dies by suicide in Bengaluru

31-year-old doctor pursuing a Doctorate of Medicine (DM) in Neurology was found dead in Bengaluru on Wednesday, the police said that they suspect he died by suicide as he was suffering from a heart ailment. The police identified the deceased as Dr S Prithvikanth, a neurologist from Kadapa, Andhra Pradesh, who was pursuing a final-year DM Neurology super-speciality course in Bangalore Medical College and Research Institute (BMCRI). He lived in Godrej Woodsman Estate apartment in Kempapura near Hebbal in north Bengaluru.

According to the police, Prithvikanth was suffering from an incurable heart disease and was depressed because of this

### Resident doctor commits suicide in Gujarat

A resident doctor, DrParth Patel working with Shardaben hospital in the Saraspur area of Ahmedabad on Mar 31, 2022

Thursday morning committed suicide by injecting an anesthesia drug on his left arm. The victim DrParth Patel was living at room number 42 in the boys' hostel in Shardaben hospital. When his friend Kamesh Patel went to call him for breakfast at around 9am on Thursday, he found Dr.Parth unconscious and an empty vial of an anesthesia injection near his bed.(44)

### PG medical student, GGH,AP, commits suicide

A second year PG medical student, who had earlier tried to kill herself by injecting poison, died on october,25/2016. Tense moments were witnessed at the GGH after relatives and students protested and demanded that action be taken against a professor. A diary purportedly written by Dr. Rani, was recovered from her room, in which she has accused a senior professor of harassment. Dr. Rani had also written separate letters to her husband, a paediatrician, her brother and the police, and had mentioned the name of the senior professor.

### Telangana medico found dead at govt. hospital

A second-year post-graduate medical student was found dead at Government Medical College, Nizamabad, on Friday morning. The medico, G Swetha, 27, was a student of obstetrics and gynaecology. The exact cause of death is not known yet.(45)

*Top E.R. Doctor Who Treated Virus Patients Dies by Suicide* Dr. Lorna M. Breen, who worked at a Manhattan hospital that treated many coronavirus patients died by suicide on April 27, 2020 (46)

# Depressed junior doctor commits suicide in Hyderabad's Gandhi Hospital

A 35-year-old junior doctor G. Jhansi, from Gandhi Hospital ended her life due to depression. Dr Jhansi, a native of Narsampet, Warangal District, was pursuing her Post Graduation from Gandhi Medical College after doing her MBBS from Russia.(47)

### Depressed over his loneliness, doctor commits suicide

A 36-year-old doctor was found dead in his flat at Ramnagar in Musheerabad on Saturday in a pool of blood. Police said that Dr M. Vijay Kumar has cut his stomach using a surgical blade. Police found a suicide note saying that he was depressed over his loneliness.(48)

### COVID-19 Infection Damages the Brain Cells

A new study has revealed that SARS-COV-2 infects brain cells called astrocytes, causing structural changes in the brain. In the study, the researchers analyzed the brain samples of 26 people who had died of COVID-19.Suicidal tendency in doctors can be attributed because the SARS-COV-2 damage the brain cells of the doctors, who attended Covid patients.(49)

## COVID-19 Doubles the Risk of Mental Health and Financial Problems

According to a study published in the journal PNAS, older adults infected with COVID-19 were twice as likely to develop mental health problems such as depression and anxiety, and suffer from financial difficulties. The study enrolled 5,146 adults between the ages of 52 and 74 years to examine the immediate and longer-term impact of COVID-19 on their mental health, well-being, social interactions, and financial outcomes in both doctors and patients.

### What can we do to prevent

- Work environment changes and work hours should be minimized.
- Necessary curriculum changes Medical training should include sufficient psychiatry posting. Students should be trained on psychological aspects of suicide.warning signs, treatment options should be taught.
- Policy changes should include creating proper facilities in government hospitals, stringent laws to protect doctors from threats by patients and family members.

### Political interference should be minimized.

- Proper incentives to the work done.
- A dedicated helpline for doctors with suicidal ideation should be made available.

### **CONCLUSION**

Historically, physicians who sought help for suicidal ideation faced professional punishments like risk of having their medical license revoked, future barriers to career advancement, and restrictions on professional privileges (50)

Many non-profit organizations and healthcare systems have begun developing tools and resources for physicians and other healthcare professionals to seek help and support as well as to address systemic barriers to treatment (51)

Some professional organizations recommend that health organizations reform policy to allow physicians who want counseling to be able to access it with fewer professional penalties.

Centralized information collection should be done by professional bodies such as Indian Medical Association or Medical Council of India (or current National Medical Commission) as there is a paucity of data regarding the suicidal rates among Indian doctors (52)

"Death of a doctor is death of society." "Doctors are made from society with a lot of resources used at various levels. It is responsibility of everyone to protect the front line warriors and prevent suicides."

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