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Mental Health of Adults with Covid-19 and without Covid-19

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ABSTRACT

This systematic comparative study aimed to examine measuring the mental health of adults with and without covid-19 in Pakistan. A purposive sampling technique was utilized in this study. The sample consisted of 72 participants. Mental Health Inventory (MHI) by (Veit & Ware, 1983) was utilized for measuring the mental health of confirmed positive COVID-19 cases and the general population. Findings indicated that the COVID-19 pandemic was significantly associated with mental health and confirmed positive Covid-19 participants have less mental health than the general population. Anxiety was found higher in COVID-19 patients as compared to depression whereas in the general population depression was found higher than anxiety. Behavioral control was non-significant in both covid-19 patients and the general population. The positive effect was less in the general population than confirmed positive covid-19 patients. These findings are very important for future planning. But some limitations were that this research was conducted only in one district in Bhakkar and this sample was too short. In the future, this research should be on a large scale in which the maximum era of the country should be selected.

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1.   Introduction

WHO (2020) newly edition to SARS and common cold type viruses is COVID-19. On December 2019, this ailment spread from WUHAN a Chinese city and spread disaster among human beings. On 30th January, NCP was announced as public health emergency at international level.in Wuhan, COVID-19 was thought as a type of pneumonia that spread in entire world in December 19. Pneumonia caused by novel COVID, recognized by China's CDC that later named as NCP. WHO (2020) Covid-19 thought of a 3rd outburst of the corona virus that influenced Pakistan and other 208 countries. According to WHO 1,093,349 cases were confirmed with 58,620 deaths. At that time, the highest rates if positive events are encountered in the states of USA, after Italy and Spain. Pakistan including China was hardest hit, with the initial outbreak of COVID-19. In the West, Italy has a mortality rate of 19, while in the North; the death rate is the highest.

1.1   COVID-19 in Pakistan

In Pakistan, initial case of latest pandemic COVID-19 has been confirmed in Sindh-Karachi, on 26 Feb, 2020 by ministry of health government of Pakistan. At same time, one more case has been confirmed in Islamabad by Pakistan federal ministry of health. Round about 15 days have passed, the rate of confirmed covid-19 +ve cases reached to 20 and 471 suspected cases assigned at highest rank in province Sindh, secondly in Gilgit Baltistan. The history of these confirmed cases evolved from Syria, Iran and London. In current conditions, these cases enhanced at high rank and worst condition is likely to happen. The Govt. of

Pakistan is taking all possible stands to ensure and ensure the provision of state responsibilities for the protection of life against COVID- 19. Ever since the first incident in Karachi was confirmed, the government has made every effort to facilitate the people of the area. To ensure safety and security from this deadly plague. Although all cases have a travel history, it has been suggested that the virus has been transmitted from elsewhere in the country. To prevent the widespread of COVID-19 contacts, the Government develops precautionary measures against COVID-19, which include early detection of traces, search and tracking of contacts, social distance, isolation and quarantine.

1.2   Mental Health Model

Veit and Ware (1983) It is already proposed that the direct and indirect psychological and social influences of the corona virus disease 2019 epidemic would influence mental health now and in the near future. The outburst has occurred against the backdrop of enhanced expression of mental health problems in the UNITED KINGDOM in previous years in some groups. Additionally, severe acute respiratory syndrome corona virus 2 (SARS-CoV-2), the virus that causes corona disease, might influence the brain or activate immune responses that have adverse influence on functioning of brain and mental health in patients with coronavirus

1.3   Mental Health Care in Pakistan

WHO (2020) Pakistan's government president Arif Alvi started program for emotional wellbeing of Pakistanis on October 2019. The most neglected, low interest research and unwanted global issue i.e. mental health is taking huge attentions. For a developing country having Heath issues, low economy and pandemic problems like Pakistan the consideration of government regarding to mental health is really a huge step which is neglecting in past years (Gillani, Shafiq, Ahmad, & Zaheer, 2021). By adopting the instructions of Global mental health it wide spreading the role of initial inventions that help in such issues and their prevention. Two verified inventions are thinking of a psychological intervention for high risk mothers health in less resources setting and next is WHO mental health program. In this program they trained teachers in skill and induce reforms about mental health at school level. These new changes are imposed on every district yearly in each of four provinces in Pakistan in five years.

Achdut and Refaeli (2020) directed an examination on Unemployment and Psychological Distress among Young People during the COVID-19 Pandemic. A constant review dependent on snowball testing was led during the period of April 2020 (N = 390). We utilized progressive straight models to investigate the relationship between unemployment, psychological assets, hazard factors, and psychological distress. Unemployment was autonomously connected with more noteworthy psychological distress. Seen trust, confidence, and feeling of dominance diminished psychological distress, while monetary strain and dejection during the emergency expanded this distress. The impact of unemployment on psychological distress didn't rely upon members' asset and danger factor levels. Policymakers should create and expand wellbeing activities pointed toward lightening the emotional well-being ramifications of COVID-19-related unemployment and elevate work market mediations to help young occupation searchers incorporate into the business. These measures, which were in accordance with the UN manageable improvement objectives, seen as a significant course to advance general wellbeing.

Chen, Cheng, and Wu (2020) conducted a research on Risk factors for adolescents' mental health during the COVID-19 pandemic: a comparison between Wuhan and other urban areas in China this was a cross-sectional investigation, utilized information arbitrarily gathered in three urban areas, Wuhan, Beijing, and Hangzhou, during the pandemic. The information assortment began on February 22, 2020, and finished on March 8, 2020, a time-frame when Wuhan was under finished lockdown. The overview comprised of an aggregate of 63 things, and it relied upon to take around 5 min to finish. An aggregate of 7866 young people in these three urban communities was enrolled for the examination. Erasing the information from conventions where the young adult replied. Results indicated that there was a measurably huge contrast in nervousness side effects between members who were from Wuhan contrasted with other metropolitan territories, however not in burdensome manifestations. Furthermore, members' evaluation level, sexual orientation, relative being tainted, and study online had a direct sure prescient incentive for burdensome and nervousness side effects, while area and kin status had circuitous prescient worth. Had family members who partook in COVID-19 related work just had positive direct prescient incentive toward sadness, yet not tension (Hao,

Shah, Nawazb, Barkat, & Souhail, 2020). This investigation found a few danger factors for youths' downturn and nervousness during the pandemic. It additionally required more prominent attention to Wuhan guardians' psychological prosperity and suggested a precise methodology for emotional wellness counteraction and intercession.

Tomaszek and Muchacka-Cymerman (2020) conducted a research on Thinking about My Existence during COVID-19, I Feel Anxiety and Awe—The Mediating Role of Existential Anxiety and Life Satisfaction on the Relationship between PTSD Symptoms and Post-Traumatic Growth. The global outbreak of COVID-19 set new challenges and threats for every human being. In the psychological field, it was similar to deep existential crises or a traumatic experience that may lead to the appearance or exacerbation of a serious mental disorder and loss of life meaning and satisfaction. Courtney, Watson, Battaglia, Mulsant, and Szatmari (2020) discussed deadly pandemic COVID-19 in the light of TMT theory and named it as global contagion of mortality that personally affected every human being. Such unique conditions activate existential fears as people start to be aware of their own mortality. The main aim of this study was to test the mediating effect of existential anxiety, activated by COVID-19 and life satisfaction (SWLS) on the relationship between PTSD symptoms and post-traumatic growth (PTG) (Shair et al., 2021). We also examined the moderated mediating effect of severity of trauma symptoms on life satisfaction and existential anxiety and its associations with PTG. We conducted an online survey during the peak of the COVID-19 outbreak in Poland. The participants completed existential anxiety scale (SNE), life satisfaction scale (SWLS), IES-R scale for measuring the level of PTSD symptoms and post-traumatic growth inventory (PTGI). Results: The effect of PTSD on PTG was found to be mediated by existential anxiety and life satisfaction. We also confirmed two indirect effects: (1) the indirect effect of PTSD on PTG via existential anxiety and life satisfaction tested simultaneously; (2) the indirect effect of life satisfaction on PTG through severity of trauma symptoms. An intermediate or high level of PTSD level was related to less PTG when low and full PTSD stress symptoms strengthened PTG experiences. A therapeutic intervention for individuals after traumatic experience should attempt to include fundamental existential questions and meaning of life as well as the severity of PTSD symptoms. The severity of traumatic sensations affected the relationship between life satisfaction and post-traumatic growth.

Zhao et al. (2020) directed an exploration on Prevalence of depression and its correlative factors among female adolescents in China during the corona virus disease 2019 outbreak. The outbreak of the 2019 corona virus increased the danger of depression. In this examination, 4805 female adolescents were selected with a middle (range) age of 15 (11–18) a long time. Of them, 1899 (39.5%) experienced depression with a CES-D score of > 15. The beginning of the depression was essentially identified with age, grade, inaccessible learning, and demeanor toward Corona virus, rest span, and actual exercise length. Furthermore, members matured 15–18 years took an interest in removed learning worried about Corona virus, by rest span/day of < 6 and with actual exercise term/day < 30 min addressed to be independent factors for suffering from depression. During the Corona virus outbreak, depression was normal among female adolescents. More established age, far off learning, worry about Corona virus, short rest span, and actual exercise term addressed the independent factors for suffering from depression. This present study conducted to study the following aspects.

- To assess level of mental health among confirmed positive COVID-19 patients.
- To assess level of mental health among general population.

The Hypotheses of the Study are as follows;

- Covid-19 will affect the mental health according demographical variables.
- Depression level will more in confirmed positive covid-19 then general population.
- Anxiety level will more in confirmed positive covid-19 whenever Anxiety level will less in general population.
- Behavioral control will more in general population then confirmed positive covid-19.
- Positive effects will more in general population then confirmed positive covid-19.
- Overall Confirmed Positive Covid-19 participants have less mental health then general population.

2.   Literature Review

Our research explained mental health among Confirmed Positive COVID-19 and General Population in Adults. In which we measured the level of mental health among confirmed positive Covid-19 and the general population by comparing both samples. Whenever many other types of research examined the relationship between mental health and Covid-19 among the general population. There were many types of research about mental health and Covid-19. Now we will discuss these researchers that correlate with my topic in detail.

Bonsaksen et al. (2020) directed an examination on Post-Traumatic Stress Disorder and Associated Factors during the Early Stage of the COVID-19 Pandemic in Norway. The COVID-19 flare-up and the unexpected lockdown of society in Walk 2020 to a great extent affected individuals' day-by-day life and offered to ascend to worries for the psychological well-being of everybody. An overview was administered through online media channels, to which an example of 4527 grown-ups (≥18 years) reacted. Manifestation defined PTSD was estimated with the PTSD Agenda for the DSM-5. The things were explicitly linked to the COVID-19 pandemic. We utilized the DSM-5 indicative guidelines to arrange members as fulfilling the PTSD manifestation rules or not. Relationship with PTSD was examined with single and various calculated relapse examinations. The commonness of side effects defined PTSD was 12.5% for men and 19.5% for ladies. PTSD was associated with lower age, female sexual orientation, absence of social help, and scope of pandemic-related factors, for example, monetary concerns, expecting financial misfortune, having been in quarantine or separation, being at high danger for confusions from COVID-19 infection, and having worry for family and dear companions. All in all, post-traumatic stress responses give off an impression of being regular in the Norwegian populace in the early stages of the COVID-19 flare-up. Worries about finances, wellbeing, and loved ones appear to issue.

Lasheras et al. (2020) directed an exploration on Prevalence of Anxiety in Medical Students during the COVID-19 Pandemic. A Quick Deliberate Survey with Meta-Investigation. The epic Covid sickness (COVID-19) pandemic brought a lot of pressing factor for medical students, who regularly show raised anxiety rates. The point was to investigate the prevalence of anxiety in medical students during this pandemic. This deliberate audit and mini meta-investigation led following the PRISMA guidelines. Two analysts independently looked through PubMed on 26 August 2020 for cross-sectional investigations on medical students during the COVID-19 episode, with no language limitations applied. We then played out a manual pursuit to identify other conceivably qualified investigations. To the 1361 records recovered in the initial hunt, 4 more were added by manual inquiry on medRxiv. Finally, eight examinations were finally included for subjective and quantitative investigation, which yielded an expected prevalence of anxiety of 28% with huge heterogeneity between considers. The prevalence of anxiety in medical students was like that before the pandemic however corresponds with a few explicit COVID-related stressors (Chien, Sadiq, Kamran, et al., 2021). While some preventive and danger factors recognized in a non-pandemic setting, information and discernments on COVID-19 transmission, therapy, anticipation and avoidance contrarily associate with anxiety, emerging as a key preventive factor that may give a reasoning to why the degrees of anxiety remained stable in medical students during the pandemic while increasing in their non-medical companions and everyone. Other explanations behind the invariability of anxiety rates in this populace talked about (Chien, Sadiq, Nawaz, et al., 2021).

Passos, Prazeres, Teixeira, and Martins (2020) led an examination on Effect on Mental Health Due to COVID-19 Pandemic: Cross-Sectional Study in Portugal and Brazil. Mental health affected optional to the COVID-19 pandemic were till as of late viewed as less significant or were dismissed. Portugal and Brazil were facing the pandemic in very various manners. This study expected to portray the mental health status of the overall grown-up populace in Portugal and Brazil during the COVID-19 pandemic and investigate the contrasts between the two nations. A cross-sectional quantitative study depended on an online poll. Socio-segment information were gathered notwithstanding four approved scales: Confine (abbreviation cut-irritated liable eye) Poll, Fulfillment with Life Scale, Summed up Uneasiness Problem 7 and Patient Health Survey 2. For every result, a various linear relapse was performed. 500 and fifty individuals addressed the survey (435 ladies). The middle age was 38 years, 52.5% dwelled in Brazil and 47.5% in Portugal. The predominance of uneasiness was 71.3% (mellow nervousness was available in 43.1%), the commonness of misery was 24.7%

and 23.8% of the example had both sadness and tension. Confinement was a huge factor for sorrow yet not for tension. Prosperity was sub optimal. Mental ailment was impressively higher than pre-COVID-19 levels.

Verma and Mishra (2020) conducted a research on Depression, anxiety, and stress and socio demographic correlates among general Indian public during COVID-19. A cross-sectional survey was conducted using an electronic questionnaire. A total of 354 participants were recruited through convenience sampling. Depression, anxiety and stress were measured using Depression Anxiety Stress Scale (DASS-21), a 21-item self-reported questionnaire as results In total, 25%, 28% and 11.6% of the participants were moderate to extremely severely depressed, anxious and stressed, respectively. Binary logistic regressions indicated employment status (odds ratio (OR) = 1.91; 95% confidence interval (CI): 1.072–3.418) and binge drinking (OR = 2.03; 95% CI: 1.045–3.945) were significantly associated with depressive symptoms; gender (OR = 2.17; 95% CI: 1.317–3.589), employment status (OR = 1.77; 95% CI: 1.002–3.141) and binge drinking (OR = 2.62; 95% CI: 1.361–5.048) were significantly associated with anxiety symptoms; and binge drinking (OR = 3.42; 95% CI: 1.544–7.583) was significantly associated with stress symptoms. The severe outbreak of COVID-19 has affected the mental health of Indians.

Yamamoto, Uchiumi, Suzuki, Yoshimoto, and Murillo-Rodriguez (2020) conducted a research on The Psychological Impact of 'Mild Lockdown' in Japan during the COVID-19 Pandemic. A Nationwide Survey under a Declared State of Emergency. This study examined the psychological distress caused by non-coercive lockdown (mild lockdown) in Japan. An online survey was conducted with 11,333 people (52.4% females; mean age = 46.3 ± 14.6 years, range = 18–89 years) during the mild lockdown in the seven prefectures most affected by COVID-19 infection. Over one-third (36.6%) of participants experienced mild-to-moderate psychological distress while 11.5% reported serious psychological distress. The estimated prevalence of depression (Patient Health Questionnaire-9 score ≥ 10) was 17.9%. Regarding the distribution of K6 scores, the proportion of those with psychological distress in this study was significantly higher when compared with the previous national survey data from 2010, 2013, 2016, and 2019. Healthcare workers, those with a history of treatment for mental illness, and younger participants (aged 18–19 or 20–39 years) showed particularly high levels of psychological distress (Gillani, Shafiq, & Ahmad, 2019). Psychological distress severity was influenced by specific interactional structures of risk factors: high loneliness, poor interpersonal relationships, COVID-19-related sleeplessness and anxiety, deterioration of household economy, and work and academic difficulties. Even when non-coercive lockdowns were implemented, people's mental health considered, and policies to prevent mental health deterioration were needed. Cross-disciplinary public–private sector efforts tailored to each individual's problem structure were important to address the mental health issues arising from lockdown.

Zhao et al. (2020) directed an exploration on Social Distancing Compliance under COVID-19 Pandemic and Mental Health Impacts. A Populace Based Investigation. The accomplishment of general health measures for controlling the Covid sickness 2019 (COVID-19) pandemic depends on populace compliance. Dissected compliance with social distancing and its relationship with mental health. The Hong Kong COVID-19 Health Data Study was led from 9–23 April 2020 on 1501 grown-ups randomly tested for landline phone interviews (n = 500) and online reviews (n = 1001). Compliance with social distancing and remaining at-home, stress (Saw Pressure Scale-4), uneasiness (General Tension Issues 2), and burdensome indications (Understanding Health Survey 2) were gathered. The relationship between mental health manifestations and compliance were inspected by multivariable relapse models. Of the 1501 respondents (52.5% female, 72.3% matured 18–59 years), 74.2%, 72.7%, and 59.7% revealed abstaining from going out, going to swarmed places, and going to social get-togethers of multiple individuals, separately. Most respondents had remained at-home for at any rate four of the previous seven days (58.4%; mean 4.12, Standard Deviation 2.05). Appropriation, seen viability, and saw compliance with social distancing were related with lower feelings of anxiety and less tension and burdensome side effects Be that as it may, more days remained at-home were related with more burdensome manifestations.

3.   Method

Cross-sectional research design was used in this research studies. The sample was consisting of 72 participants by using purposive sampling technique. 36 were confirmed positive COVID-19 patients. And other 36 participants were from the general population. The age range of respondents was 16-75 years. 36 confirmed positive COVID-19 patients took from quarantine centers (Govt postgraduate colleges for girls and commerce's college Bhakkar). And other 36 participants were from the general population.

3.1 Instruments

Mental Health Inventory (MHI-18) developed by Veit and Ware (1983) was unitized to Measure Mental Health of Adults with and without Covid-19.

3.2 Profile of respondents

As stated earlier, the main purpose of investigation has to study mental health among assured Positive covid-19 And General Population. For the purpose, independent samples t-test was used.

Table A: Profile of Respondents

Variable categories	Frequency	Percentage
Age		
16-35 year	36	50
36-55 year	33	45.83
56-75 year	3	4.16
Total	72	100
COVID Status		
Confirmed Positive	36	50
General Population	36	50
Total	72	100
Marital Status		
Married	40	55.55
Unmarried	32	44.44
Total	72	100

4. Results

As shown in above table. In table 3, Because of ($p= 0.200<0.05$) There is no significant difference in Confirmed Positive Covid-19 and General Population. It shows that General Population had higher mean scores than confirmed positive Covid-19 which shows that general population had higher depression level as compared to the confirmed positive cases.

Table 1: Independent Samples t-test to measure level of depression among confirmed positive Covid-19 and general population (N=72)

	Confirmed Positive (n = 36)		General Population (n = 36)		t (70)	p	95% CI		Leven, F
	M	SD	M	SD			LL	UL	
Level of Depression	3.9167	1.25071	4.3333	1.47358	-1.293	.200	-1.05914	.22581	.631

Table 2: Independent Samples t-test to measure level of anxiety among confirmed positive Covid-19 and general population (N=72)

	Confirmed Positive (n = 36)		General Population (n = 36)		t (70)	p	95% CI		
	M	SD	M	SD			LL	UL	Leven, F
level of anxiety	3.8889	1.32617	5.1944	1.14191	-4.476	.001	-1.88729	-.72383	1.592

As shown in above table. Because of ($p= 0.001<0.05$) There is a noteworthy dissimilarity in Confirmed Positive Covid-19 and General Population. It shows that General Population had higher mean scores than confirmed positive Covid-19 which means that confirmed positive cases of COVID-19 had higher level of anxiety than general population.

Table3: Independent Samples t-test to measure level of behavioral control among confirmed positive Covid-19 and general population (N=72)

	Confirmed Positive (n = 36)		General Population (n = 36)		t (70)	P	95% CI		
	M	SD	M	SD			LL	UL	Leven, F
level of behavioral control	3.0833	1.44173	2.1389	1.39699	2.823	.006	.27713	1.61176	.152

As shown in above table, Because of (p= 0.006<0.05) There is a noteworthy differentiation in Confirmed Positive Covid-19 and General Population. It shows that confirmed positive Covid-19 had higher mean scores than general population which means that there is no significant difference of behavioral control in confirmed COVID-19 cases and general population.

Table 4: Independent Samples t-test to measure level of positive effects among confirmed positive Covid-19 and general population (N=72)

	Confirmed Positive (n = 36)		General Population (n = 36)		t (70)	p	95% CI		
	M	SD	M	SD			LL	UL	Leven, F
level of positive effects	4.3056	1.61810	2.8611	1.49576	3.933	.001	.71198	2.17691	.619

As shown in above table, Because of (p= 0.001<0.05) There is a noteworthy dispute in Confirmed Positive Covid-19 and General Population. It shows that confirmed positive Covid-19 had higher mean scores than general population which means that patients of confirmed positive COVID-19 had higher level of positive affect as compared to general population.

Table 5: Independent Samples t-test to measure overall mental health among confirmed positive Covid-19 and general population (N=72)

	Confirmed Positive (n = 36)		General Population (n = 36)		t (70)	p	95% CI		
	M	SD	M	SD			LL	UL	Leven, F
Overall mental health	3.3333	1.37321	1.8056	1.32707	4.800	.001	.89298	2.16256	.955

As shown in above table, Because of (p= 0.001<0.05) There is a noteworthy dispute in Confirmed Positive Covid-19 and General Population. It shows that confirmed positive Covid-19 had higher mean scores than general population which means that patients of confirmed positive COVID-19 had higher level of overall mental health as compared to general population.

5.   Discussion

This study investigated mental health among confirmed positive Covid-19 and general population among adults in which mental health was measured according to aspects of mental health and also compared mental health among Confirmed positive Covid-19 and general population. All the main study variables were remarkably inter-linked. The main purpose of this research was to appraise mental health among confirmed positive coronavirus and the general population. Depression level is less in confirmed positive covid-19 patients than in the general population. Anxiety level is more in confirmed positive covid-19 patients whenever Anxiety level is less in the general population. Confirmed Positive Covid-19 and the general population have equal behavioral control. Positive effect is less in the general population than confirmed positive covid-19 patients. Whenever according Verma and Mishra (2020) Overall, 25%, 28%, and 11.6% subjects ranged from modest to extreme severe depression, anxiety and stress, respectively. Due to Covid-19 in Indian public. Chi et al. (2020) a significant proportion of young adults exhibit clinically related post-traumatic stress disorder (PTSD), an pandemic of COVID-19 in Chinese college students. Yang et al. (2020) in total, 53.8% of applicants described the psychological effects of the outburst as average or extreme at the time of the initial stages of the 2019 COVID-19. (Bellucci et al., 2020) the study involved 863 students and 249 family members. The average PHQ9 score was strongly correlated with students and family members, respectively. Due to dissatisfaction with COVID-19 prevention measures, it is believed. Son, Hegde, Smith, Wang, and Sasangohar (2020) 195 students report increasing stress and anxiety due to coronavirus pandemic. Multiple pressures

had been identified that supplied to enhanced stress level, anxiety, & depression in students. These include fears & anxieties about your health & difficulty concentrating, sleep disturbances, reduced social interaction because of physical distance, & the United States. Concerns over curricular performance increase. In our research this sample was too short. This data took from 72 participants as a sample. In which 36 participants were from quarantine centers (Govt. post_ graduate colleges for boys, Govt. post _graduate colleges for girls and commerce's college Bhakkar).and other 36 participants as general population took from professors academy and rescue 1122 department and family members. This sample is too short so there should be more researches with large sample that why general population feel anxiety during Covid-19. New researches should be also, because comparative studies are very less on topic of mental health among confirmed positive Covid-19 and general population. So that maximum factors can be explore.

Total economics is in the hand of our general population at Covid-19 time. So it should be better mental health of our general population. So government should make some best policies for better mental health. If our general population will be mentally fit, they can provide energy for our country. According to our results, a positive effect was less in our general population so health authorities should make strong policies for better positive effects in the general population. So that they can help their family and country. In my results, we observed whose age was from 61-100. They had less mental health. So the government makes strong policies for the better mental health of old age people. These people can also prove our best economy. In my outcome, we measured that married people had poor mental health than unmarried people. So it should be better policies for married people.

This research conducted only in one district. This sample was too short. This data took from 72 participants as a sample. In which 36 participants were from quarantine centers (govt. post graduate colleges for boys, govt. post graduate colleges for girls and commerce's college Bhakkar).and other 36 participants took from Govt. post-graduate college bhakkar those were from students, teachers, and class 4 community as the general population. There is no national epidemiological study available in Pakistan to provide an overall picture of mental health problems. At the time of writing, there are still occasional riots in different parts of the country, which could lead to an increase in the incidence of mental illness, which requires a comprehensive national survey and leave room for future policy revisions will be given.

In the future, this research should be on a large scale in which the maximum era of the country should be select. It was starting of Covid-19, at this time victims were very less in quantity, in future it can be possible this research can be on a large sample. So, researchers should conduct on the large sample in future. There are no national epidemics available in Pakistan to provide an overall picture of mental health problems so in the future researchers should conduct research on a large population. So that we can get many benefits in future. Situation changes from time to time in different parts of the country. So researchers should conduct research in the future. So that our country can take much beneficent according to the nature of future time.Covid-19 is a global issue, whole the world is involved in this big issue. So it is necessary maximum researches should be conducted in the future so that we can minimize our mental health issues.

This research is carried out with honesty and in terms of data collection, results and all the procedure. Permission is also taken from DHO health for data collection. Participants were not harmed and forced to data collection. Follow complete SOPs of corona virus. Follow 6 feet distance from covid-19 case and researcher. Researcher used proper goggle, N95 mask, and corona suit etc.

6.   Conclusion

These studies found that the majority of confirmed positive Covid-19 have less mental health than compare to the general population. The main objective of this study was to assess mental health among confirmed positive Covid-19 and the general population. According to our hypothesis, our first hypothesis was, Covid-19 will affect mental health according to age wise. We concluded that 15-30 years of age have better mental health than 31-60 years Of age and 61-100 years of age have better mental health than 31-60 years Of age. Our second hypothesis was, Covid-19 will affect mental health according to education wise. We concluded that uneducated level participants have better mental health than Primary

level participants. Middle-level participants have better mental health than Matric level participants. Intermediate level participants have better mental health than Bachelor level participants. M.Phil. the level participant has better mental health than the Master level participant. M.Phil. the level participant has better mental health than the Religious education level participant. Our third hypothesis was, Unmarried participants, will have better mental health than married participants. We concluded that Unmarried participants have better mental health than the married participant.

Other hypothesis concluded according mental health inventory in which (4+6+10+11+18) measured anxiety, 4 items (2+9+12+14) measured depression, 4 items (5+8+16+17) measured behavioral control and 4 items (1+3+7+13) measured positive effect. So our 5th hypothesis was, depression level will more in confirmed the positive covid-19 patients than the general population. According to 4 items (2+9+12+14) which measured depression, in the second item General Population has better mental health than Confirmed Positive Covid-19. In the 9th item Confirmed Positive Covid-19 have less mental health than the general population. In the 12th item Confirmed, Positive Covid-19 have less mental health than the general population. In the 14th item Confirmed, Positive Covid-19 have less mental health than the general population. According to all items our hypothesis is rejected because depression level is less in confirmed positive covid-19 patients than in the general population.

Our 6th hypothesis was, Anxiety level will more in confirmed positive covid-19 patients whenever Anxiety level will less in the general population. According to 5 items (4+6+10+11+18) which measured anxiety, the fourth item Confirmed Positive Covid-19 has less mental health than the general population. In the 6th item Confirmed, Positive Covid-19 have less mental health than the general population. In the 10th item Confirmed Positive Covid-19 have better mental health than the general population. In the 11th item Confirmed, Positive Covid-19 have less mental health than the general population. In the 18th item Confirmed, Positive Covid-19 have less mental health than the general population. In these five items, there is only1 items that is against our hypothesis so our hypothesis is accepted because Anxiety level is more in confirmed positive covid-19 patients whenever Anxiety level is less in the general population. Our 7th hypothesis was, Behavioral control will more in the general population than confirmed positive covid-19 patients. 4 items (5+8+16+17) measured behavioral control. In the 5th item Confirmed Positive Covid-19 have better mental health than the general population. In the 8th item Confirmed Positive Covid-19 have better mental health than the general population. In the 16th item Confirmed, Positive Covid-19 have less mental health than the general population. In the 17th item Confirmed, Positive Covid-19 have less mental health than the general population. In 4 items 2 items from 4 which are against my hypothesis. We concluded Confirmed Positive Covid-19 and the general population have equal behavioral control.

Our 8th hypothesis was, the positive effect will more in the general population than confirmed positive covid-19 patients. 4 items (1+3+7+13) measured positive effect. We concluded that the first item Confirmed Positive Covid-19 has better mental health than the general population. The third item Confirmed Positive Covid-19 has better mental health than the general population. In the 7th item Confirmed Positive Covid-19 have better mental health than the general population. In the 13th item also found Confirmed Positive Covid-19 has better mental health than the general population. So our hypothesis is rejected. We concluded that positive effect is less in the general population than confirmed positive covid-19 patients.Our9th hypothesis was, overall Confirmed Positive Covid-19 participants have less mental health then general population. Total Sample of Confirmed Positive Covid-19 (n = 36), which total means score of all items of MHI (M=65.1945) had less means scores than total Sample of General Population (n = 36) which total means score is (M=70.0554). It proves Confirmed Positive Covid-19 participants have less mental health then general population.

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