



MENTAL AND PHYSICAL HEALTH ISSUES FACED AMONG PEOPLE OVER 70 YEARS CHEMISTRY

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ABSTRACT:

The research study describes the rising possibilities in the growth of mental health and physical health of older people over 70 years of chemistry. The role of chemists in search of the rising possibilities to reduce the abnormal rise of disease is highlighted in the study. This portion explains the various factors having static implications of the study. The area of discussion includes the data collection process and data analysis by SPSS method. Statistical analysis and findings of the study has been discussed here. The World Health Organization has determined the potential risks relating to mental and physical health which helps in focusing on the absolute prospects of the healthcare system. The rising capabilities in improving the mental and physical health of older people have encouraged them in taking initiatives

Keywords:- Mental health, Physical health, Clinical implications, Social well-being

INTRODUCTION :

The body changes with age and there are various hormonal imbalances in the transformation process. Old cells sometimes die due to the division into a limited number of cells. Mental and physical health issues are prevalent in nature and can be found to arise mainly among older people. As stated by Álvarez *et al.* (2020), it is relevant that substantial losses mainly occur in people who are having a stroke and neurogenerative disorders. Therefore, it is a matter of concern to take care of both mental and physical health.

The World Health Organization (WHO) defines health, as a state of mental physical and social well-being and not merely the absence of disease or infirmity. As per the critical analysis by Atolani *et al.* (2020), mental health conditions are likely to rise worldwide and are prevalent among people for nearly **13%**. Research studies have viewed that the chemistry of health is

intercepted with the variances that are consanguine in nature.

The data presented here estimates the severity level of the disease having undesirable outcomes. As stated by Bjerregaard *et al.* (2020), nearly **58.7 million** includes various conditions that indicate the presence of health issues as well as their adverse effects on the affected people.

Healthcare initiatives set a program for mitigating the problems in correspondence to the infection prevention efforts that are having greater problems. As stated by Chatterjee *et al.* (2020), the rising issues of mental and physical health are needed to be subjugated which requires patients to receive medications that are appropriate for clinical needs.

The aim of the study is to analyze the Mental and physical health issues faced by people over 70 years of Chemistry. The role of chemists in search of the rising possibilities to reduce the

abnormal rise of disease is highlighted in the study.

RESEARCH OBJECTIVES :

RO1: To analyze the mental health and physical health issues faced by the older adults

RO2: To determine the factors supporting the growth of mental and physical health benefits

RO3: To evaluate the relationship between mental and physical health with aging

RO4: To highlight the role of chemistry in the area of mental and physical health.

Research questions

RQ1: What are the mental health issues faced by older adults?

RQ2: What are the factors supporting the growth of mental and physical health benefits?

RQ3: What is the relationship between mental and physical health with aging?

RQ4: What is the role of chemistry in the area of mental and physical health?

Literature Review

Analyzing the mental health and physical health issues faced by the older adults

Mental and physical illnesses are common among the UK people. It is estimated that more than one in five adults is living with mental health problems. Mental health and physical health are fundamentally linked. There are multiple associations that can impact the quality of life of people. As per the critical analysis by Ghaibi *et al.* (2017), the most common health issues faced by older adults account for **6.6%** of risk factors leading to greater suffering. Older adults who are aged above 60 years have a greater contribution to society and families. Establishing a multidisciplinary national body needs to make use of medical guidelines having congruent outcomes (Chew-Graham *et al.* 2020). The health risks mainly arise due to a lack of treatment facilities or other external factors. It is evident that a health risk is a chance that

eventually harms health by deteriorating the conditions.

Approximately nearly **15%** of older adults suffer from mental disorders. As per the critical analysis by Gough *et al.* (2020), the world's problem is aging rapidly which as a result leads to more health problems. Between 2015 and 2030 it is estimated that the proportion of the world's population is estimated to rise from **12%** to **22%** significantly. There are multiple factors that can trigger the risk of mental as well as physical health.

Evaluate the relationship between mental and physical health with aging

Mental health has an adverse effect on physical health and vice versa. Both health dimensions play an integral part in human life. There lies a dynamic relationship between mental health and physical health. As per the critical analysis by Herbstman *et al.* (2019), with the increasing number in population of older adults, it can be illustrated that centenarians have several chronic conditions that are significant indicators of psychological illnesses.

There are various health illnesses such as cardiovascular disease (**72%**), osteoarthritis (**54%**), dementia (**51%**), and ischemic heart diseases (**28%**) have evaluated the certain consequences that can affect the health conditions of the patients adversely. As per the critical analysis by Hermawan *et al.* (2020), the effects of physical health are needed to be considered based on accounting for the psychological well-being of the individual. An individual suffering from chronic physical conditions is likely to face the negative consequences of mental health issues.

Specifically, the area of knowledge mainly determines the role of physical health activities in reducing the risk of coronary heart disease. The psycho-social structure of mental health is determined by the facilities received to improve mental health. As stated by Limas *et al.* (2018),

the factors mainly contributing to the growth and development of mental and physical health aim in following the protective factors embedded with medical knowledge and health care practitioners.

METHODOLOGY :

Research methodology involves valuable data sets and information that are authentic in nature. The relevant ideas out forward having constructive factors are to study in the research module. As stated by Mohammadzadeh *et al.* (2020), research methodology ensures the reliability and validity of the study. The data collection process was developed by the survey method. The research approach used here is the deductive approach followed by a descriptive research design respectively. The survey method was implemented on 85 participants. The research was developed based on the questionnaire consisting of a total of 13 questions that consisted of 3 demographic factors and 10 variables.

FINDINGS :

The above figure shows the age factor of the 85 participants. The cumulative percentage of the participants belonging to the age group of 20 years to 30 years is 8.2%, and 31 years to 40 years is 24.7%, and the cumulative percentage of people of age range from 41 years to 50 years is 57.6% and the rest 51 years to 60 years is 100% respectively.

The pie chart of the age factor of 85 participants depicts that 8.24% of the participants belong to the age group of 20 years to 30 years, 16.47% belong to the age group of 31 years to 40 years, 32.94% of the participants belong to the age group of 41 years to 50 years and 42.35% of the participants belong to the age group of 51 years to 60 years respectively.

The above figure shows the gender of the 85 participants. The cumulative percentage of the participants belonging to the male group is 65.9%. The cumulative percentage of people

belonging to the female group is 41.2% and the rest prefer to not say 100% respectively.

The pie chart of the age factor of 85 participants depicts that 41.18% of the participants belong to the female group. 24.71% belong to the male group. Finally, 34.12% of the group members belong to prefer to not say respectively.

The above figure shows the income level of the 85 participants. The cumulative percentage of the participants belonging to the income level of 20,000 to 30,000 is 8.2%, 30,000 to 40,000 is 32.9%, 40,000 to 50,000 is 74.1% and 50,000 to 60,000 is 100% respectively.

The pie chart of the income level of 85 participants depicts that 8.24% of the participants belong to the level between 20,000 to 30,000, and 24.71% belong level between 30,000 to 40,000. About 41.18% belong to the 40,000 to 50,000 income level and 25.88% belong to 50,000 to 60,000 respectively.

Table 4 signifies the descriptive statistics of the research participants. The mean value of the result is 3.33 and the standard deviation of the independent variable is 1.02 and the dependent variable is 1.32 respectively.

Table 5 illustrates the correlation factor of the research participants. Correlation follows the Spearman formula which shows that the correlation is significant at 0.01 levels.

Table 6 highlights the model summary having the R square value of 0.43 at a 0.00 level of significance.

The KMO and Bartlett's test shows the approximate Chi-square value which is 111.67, which means it is significant at the 0.00 level.

Table 8 shows the mean square value which is 15.93 and the sum of the total square is 147.24 respectively.

In Table 9, the reliability statistics view Chronbach's Alpha valuing 0.039 and the grand mean is 5.89 respectively.

DISCUSSION :

Physical health problems significantly increase the risk of mental health. Taking good as well as prioritizing health factors reduces the chances of risks. As stated by Morales *et al.* (2020), maintaining an active lifestyle improves the quality of life of elderly people. Chemical factors have made innumerable contributions to medical science as well as the advanced technologies that have modernized the area of health care benefits.

Research studies have reviewed that exercising and a balanced diet are the two important factors that reduce health issues to **50%** (Ross *et al.* 2019). Large epidemiological studies have verified that older people face challenging situations which later on affect them adversely. The World Health Organization has determined the potential risks relating to mental and physical health which helps in focusing on the absolute prospects of the healthcare system.

The medical transcription of health care facilities helps in common indicating the rising qualities that are highly effective in nature. As stated by Luo *et al.* (2017), happiness, sadness, euphoria, and excitement are the emotion triggers during different situations. The chemical relationship contributing to the improvement of mental and physical conditions releases hormones. This eventually helps in uplifting the mental condition.

The psycho-social mechanisms have refilled the ideas of interaction between physical and mental health which have culminated in the intercepting qualities of health conditions (Kunii *et al.* 2018). Isolation of senior members triggers mental health disorders. A person suffering from arthritis lacks the mobility factors which eventually lead to a lack of social interaction. Not only does the condition become critical for the affected person but also it triggers the growth of mental illness such as depression.

Older people may experience stressors at any point in their life. For example, older people may

get into problems facing chronic pain, reduced mobility, arthritis, and asthmatic tendencies that eventually lead to an experience of bereavement (Hanvold *et al.* 2019). Alzheimer's and dementia are some of the mental health issues that are mostly seen in adults. This raises the stressor factors making them feel more distressed.

CONCLUSION :

Thus, the rising capabilities in improving the mental and physical health of older people have encouraged them in taking initiatives such as spreading awareness about the importance of mental health and its consequences on physical health. Health risks are hard to grasp especially when emotions are running high. Therefore, it is essential to acknowledge the chemical regeneration that helps in raising the possibilities of healthy growth.

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Medical-Sensors-for-Clinical-
Decisions.pdf retrieved on 14TH April,
2023



Table 1: The age factor**1. What is your age?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 20 years to 30 years	7	8.2	8.2	8.2
31 years to 40 years	14	16.5	16.5	24.7
41 years to 50 years	28	32.9	32.9	57.6
51 years to 60 years	36	42.4	42.4	100.0
Total	85	100.0	100.0	

Table 2: Gender**2. What is your gender?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Female	35	41.2	41.2	41.2
Male	21	24.7	24.7	65.9
Prefer not to say	29	34.1	34.1	100.0
Total	85	100.0	100.0	

Table 3: Level of income**3. What is your income?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 20,000-30,000	7	8.2	8.2	8.2
30,000-40,000	21	24.7	24.7	32.9
40,000-50,000	35	41.2	41.2	74.1
50,000-60,000	22	25.9	25.9	100.0
Total	85	100.0	100.0	

Table 4: Descriptive statistics

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
IV1.1	85	2	5	3.33	1.028	.238	.261	-1.059	.517
DV	85	2.00	7.00	5.0941	1.32399	-.839	.261	.170	.517
IV1	85	5.00	9.00	6.6824	1.44100	.407	.261	-1.261	.517
IV2	85	3.00	9.00	5.8941	1.81281	.321	.261	-.722	.517
IV3	85	4.00	10.00	6.3294	1.65031	.708	.261	-.221	.517
IV4	85	2.00	10.00	5.4706	2.34312	.521	.261	-.538	.517
Valid N (list wise)	85								

Table 5: Correlation

Correlations

		DV	IV1	IV2	IV3	IV4
DV	Pearson Correlation	1	.153	-.596**	-.358**	-.076
	Sig. (2-tailed)		.162	.000	.001	.490
	N	85	85	85	85	85
IV1	Pearson Correlation	.153	1	-.437**	.009	.531**
	Sig. (2-tailed)	.162		.000	.931	.000
	N	85	85	85	85	85
IV2	Pearson Correlation	-.596**	-.437**	1	.179	-.036
	Sig. (2-tailed)	.000	.000		.101	.745
	N	85	85	85	85	85
IV3	Pearson Correlation	-.358**	.009	.179	1	.347**
	Sig. (2-tailed)	.001	.931	.101		.001
	N	85	85	85	85	85
IV4	Pearson Correlation	-.076	.531**	-.036	.347**	1
	Sig. (2-tailed)	.490	.000	.745	.001	
	N	85	85	85	85	85

Table 6: Regression

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.658 ^a	.433	.404	1.02180	.433	15.258	4	80	.000	2.705

Table 7: KMO and Bartlett's test**KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.480
Bartlett's Test of Sphericity	Approx. Chi-Square	111.678
	df	10
	Sig.	.000

Table 8: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	63.721	4	15.930	15.258	.000 ^b
	Residual	83.526	80	1.044		
	Total	147.247	84			

Table 9: Reliability statistics**Reliability Statistics**

Cronbach's Alpha	N of Items
.039	5

ANOVA with Cochran's Test

	Sum of Squares	df	Mean Square	Cochran's Q	Sig
Between People	265.835	84	3.165		
Within					
Between	138.565	4	34.641	40.600	.000
Items					
People					
Residual	1021.835	336	3.041		
Total	1160.400	340	3.413		
Total	1426.235	424	3.364		

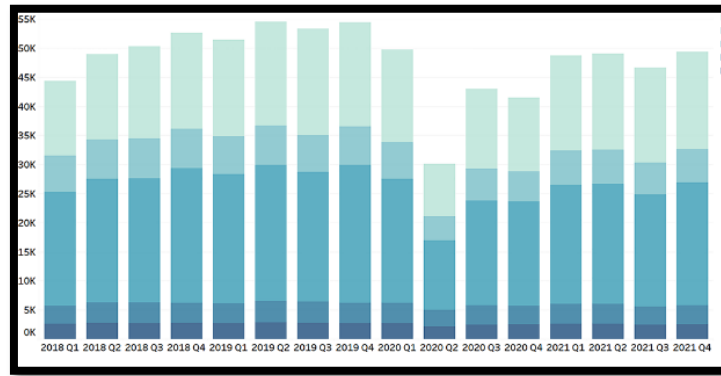


Figure 1: Statistical review of mental and physical health
(Source: Influenced by Statista, 2020)

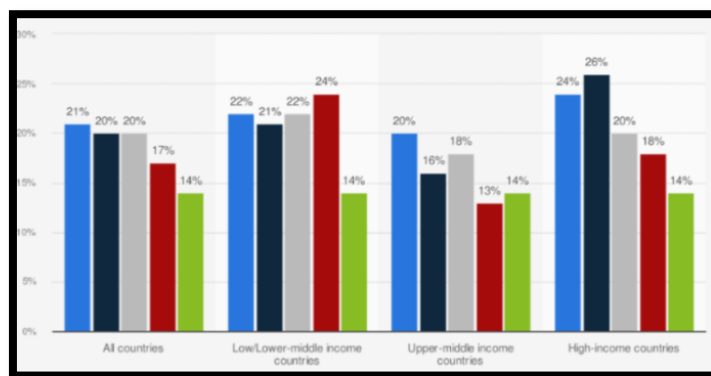


Figure 2: Rising issues of mental and physical health
(Source: Influenced by Chew-Graham *et al.* 2020)

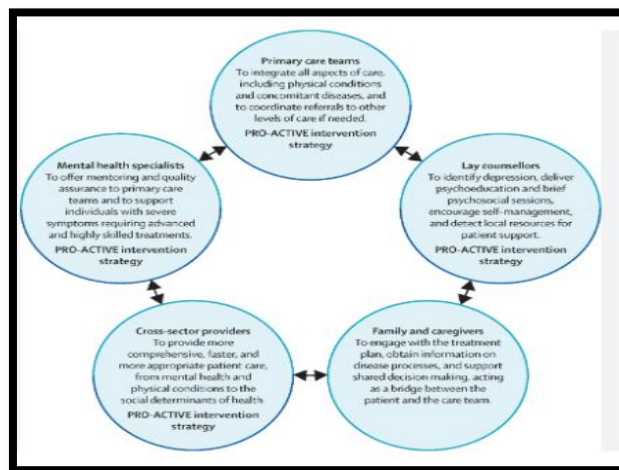


Figure 3: Mental health and physical health issues faced by the older adults
(Source: Influenced by Ghaibi *et al.* 2020)

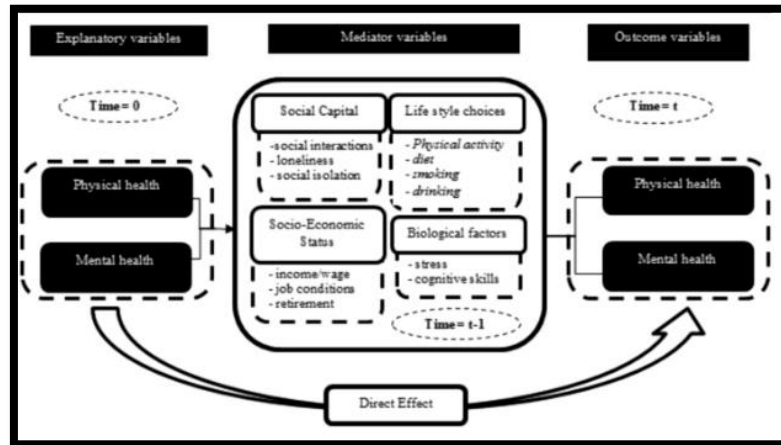


Figure 4: Relationship between mental and physical health with aging
(Source: Influenced by Herbstman *et al.* 2019)

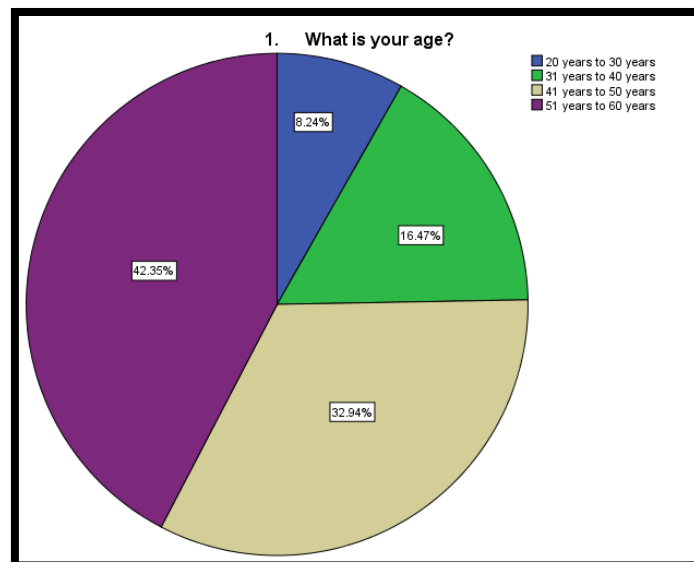


Figure 1: The age factor

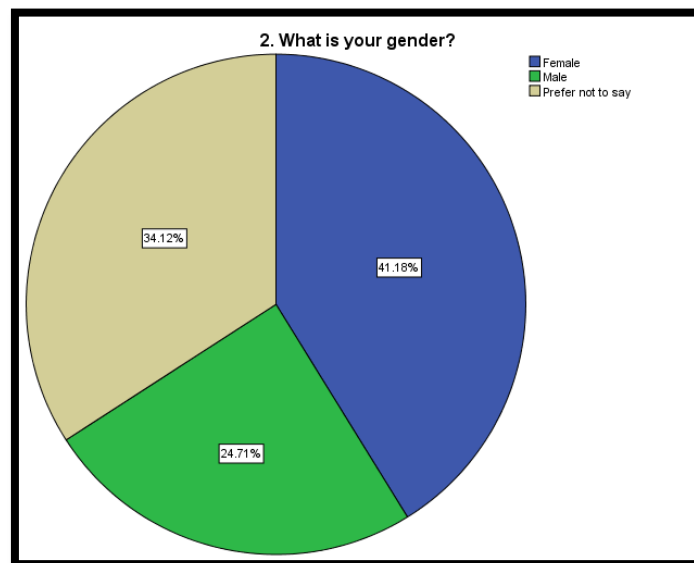


Figure 2: Gender

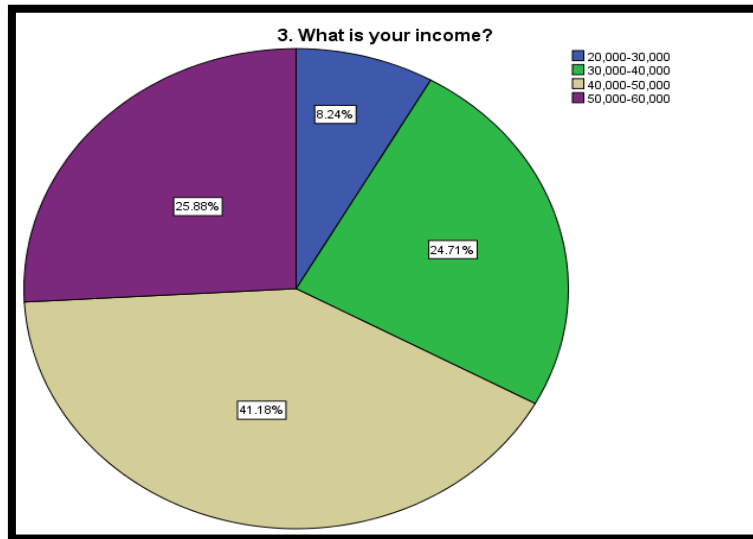


Figure 3: Level of income