

Impact of Education on Health in Afghanistan: A Case of Kabul

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ABSTRACT

The purpose of this study is to discover the impact of education on health in Afghanistan a case of Kabul through various review articles and authentic sites to elucidate that education and health have a strong correlation with each other in developing nations, especially in Afghanistan. In Kabul, there have been various inferior effects on the health sector in the past several years, roughly in 1995–2002, such as hypertension, mental diseases, nervous illnesses, deep depression, malnutrition, irritability, emphysema, or diabetes. In the period of 2003–2021, there have been reduced health illnesses due to an increasing education system for both females and males under the strongest inspirations. This study found that the education index has a high impact on life expectancy (health) through the estimation of HDI, and as the graduation of both male and female populations by estimation of one simple t-test is greater than the p-value in the 2021 year, its mean Accepted null hypothesis; hence, it has had a positive effect on education along with the health system as well as A two-way ANOVA of the enrollment of students in 2022 shows males have had a positive impact on the boosting of education and health, which bring prosperity to society; however, female enrollment has an inverse impact on education and healthcare. Lastly, the study examines indirect variables (third-party variables) that have impacted the health and healthcare system.

Keywords- Education, Health, 14 Districts, Kabul, Afghanistan.

I. INTRODUCTION

The influence of education on health has been a determinant of mortality receiving increasing scrutiny because the rate of mortality reduction in developing countries seems to have slowed down to a level of long and good expectancy below those thought achievable merely a few years before. (Leigh 1983). no evidence of a causal association between education and health conduct (k and Royer 2013; Arendt 2005 and Braakmann 2011). current evidence of significant protective effects of education on BMI but not on smoking (Kemptner 2011). Both between women and among men there appears to be a strong positive association between education level and health. Higher-educated people generally report themselves to be in a better health state than the lower-educated (Groota. and Brink den van 2005). Empirical research often discovers that the influence of education on health is at least as great as the effect of income (Feinstein, Anderson, T. M., and Hammond

2006). The study delineating education and health both are indicators Human Development Index as it knows as Human Resources. It has a play vital role in the development of nations especially in the economic sector as well as has a positive and negative impact on one country with respect to the growing and downturn of the country. the study emphasized the impact of Education on health and high strong positive correlation between each other especially in developing nations. The research focused, Education has been various direct and indirect positive and negative impacts on the health sector in Afghanistan in the Ex-period, however, afterward the Republic of Islamic Afghanistan education gradually increased in the Capital of Afghanistan along with all provinces and did impact on the health system as such as reduce the percentage of barbecues thinking, smoking, Anxiety, psychological diseases, reduce destitute, reduce mortality rate and etc. By the analysis of this study, gross enrollment literacy is 0, and adult literacy is 37.28 percent, with impact imposed on health only 61.63

percent in 2021. Moreover, education has a positive impact on Afghan women working approximately 38000 in both private and public clinics in 2021. However, in 2023 year reduce the amount due to the restriction of Emirate Islamic Afghanistan, hence 1.4 million populations were grasped with *humanitarian health services* through 50 Healthiness Cluster partners notably in rural regions (WHO 2023). The aims of the study were the analysis of various independent variables under the different statistical tests regarding the impact on health and healthcare in Afghanistan a case of 14 districts of Kabul, the estimation of the HDI of Afghanistan, and its influence on the health sector in 2021.

II. LITERATURE REVIEW

Iacopino, V and Rasekh, Z. (1998) examined the study is, education is not merely a privilege but an important condition for the health and welfare of both individuals and societies in which they live. Hence, strong authority within Islamic law, and regulations with the conventionally positive impact of boosting the education of both them of female and male. Taliban have restrained females from this right in the name of Islamic religion and culture. Study finds out that women's rights recently surveyed the health and human privileges concerns in Afghanistan.

Fletcher, and Frisvold, D. E. (2009) study discovered that attending school is correlated with mostly a 5 -15 percent increase in the likelihood of using a different kind of hindering care as well as research indicates that higher education may impact preventive care via the occupational broadcasts and access to care and offered that grow up education have the potential to spill over onto prolong health choices. Blum, R. W., Li, M., Pasha, O., Rao, C., and Natiq, K. (2019) depicted in the study, teenagers have highly valued education but considered boys to be bigger beneficiaries than girls. Moreover, roughly 90 percent agree anticipating their children to accomplish secondary school independent of the child's sex with more than a third 37.89 percent indicating that weddings might be suspended until at least high education completion as well as both of them believe merry girls under the age of 18 years bounds future educational opportunities as well as raises hazards of domestic viciousness and loss of freedom with the all rights. Groot, W. and Van Den Brink (2007) effect on investigated, a few studies have looked at the direct effects of education on health as well as he concluded that the average individual return to a year of education, i.e., the direct wage effect of education is 6-8 percent. He concluded the value of the education effect on health is 15-60 percent of the wage return to education. Adkinsi Jessee Michael (2016) studies delineate, the Afghan government presently has insufficient ability to provide general access to all prospective both male and female students as well as many school-aged children living in rural regions simply don't have access to any organized

educational programs or convincing. Many of the existing schools don't have favorable constructions, safe drinking water, or hygiene facilities. the existing facilities are approximately available to able-bodied individuals. Moreover, educational occasions for individuals with disabilities are virtually none existent. He added public education system is in a state of recovery and substantial progress have been made since the fall of the Taliban Regime despite circumstance didn't improve overnight though the recovery strength is on the right pathway.

McNulty. M. Clidna., Cookson. D. Barry and Lewis. O. Michael (2012) studied that professional education has been facilitated through the 2008 National Institute for Health and Clinical Excellence respiratory zone infection postponed prescribing guidance for general specialists. he added a toolkit of instruments for medicines management groups, to facilitate good antimicrobial stewardship in primary care, is being taken forward through the public education subgroup and professional societies. After guidance from ARHAI, in 2009 the General Medical Council requested that all postgraduate deans and Royal Colleges ensure contagion prevention and control and antimicrobial prescribing become standard practice implemented in all clinical backgrounds, and that they are stressed strongly in undergraduate and postgraduate medical training. Brunello. Giorgio and Fort Margherita (2014) investigated have been studying, an estimate of the causal impact of education on health using a multi-nation arranged. We explore the contribution of health –respect to behaviors (shortly, behaviors), which we measure with smoking, drinking, exercising, and the body muscles index –to the education gradient. To do so, we decompose the gradient into two sections to estimate the causal impact of education on health using a multicounty set-up. We discover the contribution of health-related behaviors (shortly, behaviors) - which we determine with smoking, drinking, physical exercise, and the body mass a) the part arbitrated by health behaviors, and b) a residual, which contains for instance stress decrease, better decision making, better information gathering, as well as healthier employment and better neighborhood.

Gupta. Sanjeev, Verhoeven. Marijn and Erwin Tionson (1999) studies revealed that concentrating on social rates of coming back to education and on the burden of illness provide a gripping reason for policymakers to change public resources onward rudimentary education and primary health care, they do not yield conclusive proof that such a reallocation would verily assist develop the education achievement and health position of the populace. Groota, Wim and Maassen. Henrie (2006) study examined the effect of education on health is larger for men than for women. The study implied and analyze the data from a large survey for the Netherlands to estimate the education effects on health. Calculated at the average value of GDP per capita, the implied health returns to education are 1.3–5.8%. Alemi, Q., Stempel, C., Baek, K., Lares, L., Villa, P., Danis, D., & Montgomery, S. (2016)

study of stated inclination that contributes to our understanding of the mental health of Afghan refugees, an understudied and highly vulnerable group, massively deemed illegal whose status in Turkey may extent an ongoing cycle of destitute, poor health, and psychopathology.

Thomas. Reuters (2021) reported express is Afghan girls hindrance at the house and waiting for the reopening of school and universities, when they are re-open secondary and higher colleges for females, leaving them stuck at the house while their brothers and husband departure for class.

Vamos. Sandra, Okan. Orkan, Sentell. Tetine and Rootman Irving (2020) have studied the education sector as a critical domain towards these attainments and education for health literacy is a fundamental procedure and result. This can help towards significant public health goals, containing critical health literacy.

Study of Research Methodology

This study, prepared by various tentative reviews and research gaps from different authentic cites such as Google Scholar, Web-Sciences, Research Gate, and SC Imago, finds the gist of the study from the various scholars relevant to the current topic as well as the data of collection showing secondary data (process data and second-hand) have been taken from various authentic cites (official cites both world-wide and domestic) such as WDI, WB, MOE, and NGOs reports for the analysis of 2020-2021-2022.

III. STUDY OF METHOD

Table 1: Comparison between education and health (life expectancy in 2021) along with percentages

Human Development Index (HDI)		value	Result of value	Percentage s		
Life Expectancy Index	life expectancy a country	61.982	0.616366667	61.636		
Education Index	adult literacy Index	adult literacy a country	55.9294014	0.559294014	55.9294014	37.2862676 0
	Gross Enrollment Index	gross enrollment ratio of a country	0	0	0	
GDI Index	GDP per capita of a country	426 US dollar	0.22816	22.816		
HDI			0.405796448		40.5796447 6	

Note: In all the above formula the absolute numbers such as 85,25,40000,100,0, are the parameter

Sources: world bank (WB).

Table 1 shows the values and percentages of HDI, LFI, EI, and GDI are different. LEI (health) is 61.636 percent and EI is 37.728 percent. Analysis shows EI indices have a positive impact on the health sector because education brings prosperity, well-being,

The data set and statistical data analyzed have been processed through the Statistical Package for Social Science (SPSS). This study's data sets refer to the hypotheses and estimations of inferential statistics and various parametric tests such as One simple t-test, one-way ANOVA, and two-way ANOVA were conducted using the SPSS statistical software (IBM) and reached the impact of the influence of each different variable on education for bettering healthcare and activities.

IV. RESULT AND DISCUSSION

The topic of the study demonstrates that, according to the review literature, education has a crucial role in the growth of healthcare by respecting the different essentials. Therefore, higher education has a greater impact than elementary education on life expectancy and health. By the analysis of statistical parameters and estimations, one simple t-test expressed that both male and female graduates will have no significant difference in 2021 as a result of failing to reject the null hypothesis (accept the null hypothesis), its defined type 2 error, and whether education has an impact through the graduated student on the health sector, corresponding to the better wellbeing of Kabul. On the other hand, as table 7 shows, the enrollment of a female student in education in 2022' does not impact education growth; it will conversely impact the health sector by estimating the two-way ANOVA result.

knowledge, wisdom, and development to society, as with the economics sector, and reduces health illness, depression, ignorance in society, malnutrition, smoking, etc. As a result, education and health are both essential ingredients for improving health care, etc.

Table 2: Graduation of students in Kabul districts in 2021

Name of districts	Students of School graduation	
	Male student	Female students
Astalif	1,627	1,258
Bagrami	29,239	24,654
Paghman	21,860	15,848
Charasiab	5,557	4,014
Khakjabar	1,623	417
Da-Sabiz	11,632	5,965
Surobi	4,526	2,205
Shakardara	9,163	5,839
Farzah	2,693	1,809
Garabagh	5,784	2,391
Kalkan	2,761	828
Gardarah	1,185	688
Musa-ee	2,082	0
Mirbach-kot	4,975	2,504

Sources: *Moe.gov.af*

Table 2 shows the graduation of both female and male students in 14 districts of Kabul in 2021. The highest graduation of both female and male in Bagrami district, such as male is 29239 and female census is 24.654;

moreover, moreover the lower graduation of male is Gardarah, which is 1185 students, and the lowest graduation of female is Musa-ee, which is zero.

Table 3: Graduated of students different 14 districts of Mean

Statistics			
		Female student	Male student
N	Valid	14	14
	Missing	1	1
Mean		4887.14	7479.07

Table 4: one sample Statistic of graduated students of 14 districts Kabul

One-Sample Statistics				
	N	Mean	Std. Deviation	Std. Error Mean
Female student	14	4887.14	6980.327	1865.571
Male student	14	7479.07	8340.805	2229.174

Table 4 shows the graduation of both private and public secondary school students in the 2021 school year. As the analyzed results have demonstrated, female students' standard error mean is 1865.5 and male students' std is 2229.174, but there is moderate variation in both of

them. On the other hand, male student's STD is bigger than female students, the reason being the massive graduation volume, the existing more school, security, etc.

Table 5: one sample T-Test of graduated students of 14 districts Kabul

One-Sample Test						
	Test Value = 6183					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Female students	-.695	13	.500	-1295.857	-5326.18	2734.46
Male students	.581	13	.571	1296.071	-3519.7	6111.91

Table 5 shows the t-test or p-value of female students' graduation and male students graduation, which has a direct impact on the healthcare sector. As a result, both variables are not significant in the education impact on the health sector because the null hypothesis is

accepted as a result sig. (2-tailed). With respect to 0.5 and 0.571 greater than 0.005, there is no difference in female education and male education's impact on the health sector, as with the whole development of society along with the economic sector.

Table 6: Enrolment of students in 14 distric of Kabul provinces in 2022 year.

Name of districts	Institutions of Islamic		Institutions of education		School	
	Female students	Male student	Female students	Male student	Female students	Male student
Astalif	88	349	0	0	1,664	2,147
Bagrami	0	2072	0	0	39,252	48,060
Paghman	0	0	0	0	22,331	34,929
Charasiab	0	0	0	0	6,586	10,716
Khakjabar	0	0	0	0	414	1,991
Da-Sabiz	0	635	0	0	10,749	18,000
Surobi	0	0	0	0	2,553	7,221
Shakardara	0	0	0	0	8,206	12,557
Farzah	0	0	0	0	2,461	3,516
Garabagh	0	672	65	63	4,007	9,977
Kalkan	0	0	0	0	1,205	3,475
Gardarah	0	0	0	0	1,047	1,909
Musa-ee	0	0	0	0	82	3,203
Mirbach-kot	16	196	0	0	4,490	7,344

Sources: Moe.gov.af

Table 7: Two –Way ANOVA analysis of Enrollment of students in Kabul provinces in 2022 year.

Tests of Between-Subjects Effects					
Dependent Variable: Institutions of Islamic					
Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	259.833 ^a	20	12.992	.981	.515
Intercept	546.256	1	546.256	41.264	.000
Female students	.000	0	.	.	.
Male student	24.960	3	8.320	.628	.605
female students * Male student	.000	0	.	.	.
Error	278.000	21	13.238		
Total	2135.000	42			
Corrected Total	537.833	41			

a. R Squared = .483 (Adjusted R Squared = -.009)

Table 7 demonstrates a two-way ANOVA test regarding the enrollment of students in institutional education, and behind the research shows both female and male students have been impacting the health sector, defiantly it will be affecting and inclinations, male students have a not significant impact on education as respect boosting healthcare. Moreover, female students have significant effects on education as well as healthcare.

On the other hand, both males and females have a not-significant impact on education, but it will be affected in the health sector. As the result shows, the sig level of female students is less than 0.05, which rejects the null hypothesis, but the sig level of male students is 0.605, which is greater than the 0.05. As a result, it accepts the null hypothesis, and both female and male students' sig levels are less than the 0.05. As a result, it falls positive and rejects it as a type 1 error (its correct decision).

Table 8: Teachers of different education system in 14 districts of Kabul province in 2021 year

Name of districts	Teachers of Educations		Teachers of secondary educations		Teachers of Primary education	
	Male teacher	female teacher	Male teacher	female teacher	Male teacher	female s teacher
Astalif	64	35	29	2	7	4
Bagrami	445	454	74	10	58	10
Paghman	546	295	61	16	33	3
Charasiab	126	83	14	0.00	71	18
Khakjabar	57	0.00	31	0.00	12	0
Da-Sabiz	221	115	30	1	48	11
Surobi	182	16	73	0.00	53	0.00
Shakardara	248	141	84	26	38	22
Farzah	108	42	13	2	19	6
Garabagh	140	32	111	9	64	4
Kalkan	99	29	55	13	41	9
Gardarah	32	34	7	2	11	3
Musa-ee	74	0.00	53	1	20	0.00
Mirbach-kot	101	77	49	17	30	16

Sources: Moe.gov.af

Table 9: One –Way ANOVA analysis of Teachers for 14 districts in Kabul provinces in 2021 year.

ANOVA					
Teachers of Educations					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1799.608	25	71.984	1.310	.304
Within Groups	769.167	14	54.940		
Total	2568.775	39			

Table 9 shows the contributions of teachers in education in Kabul province, both male and female teachers, as well as the one-way ANOVA test between the group and within the group; therefore, the sig level between the groups is greater than the p-value ($0.304 > 0.05$) than it accepted. Null hypothesis, but it defines that the null hypothesis is true as well. There is no difference between the teacher's impact on the improvement of the health sector. Generally, one-way ANOVA shows that if teachers have an impact on the enchantment education system, the education system will have an impact on the health system.

V. CONCLUSION

Sum up the study of education and health indexes is a dimension of human development indices. It has been playing a significant role in raising wellbeing, a comfortable life, and prosperity in society (Kabul). The study emphasized the effectiveness of education on health in Kabul province based on various parameters such as domestic enrollments, adult literacy, expected years of education, colleagues, higher education, which imposes

wisdom, doctors, and rational skills on societies, along with the change in healthcare and health services. According to this topic, we analyzed AI, GL, EI, graduation of students, and enrollments for both elementary and higher education for various years. Commonly, it has an influence on education and alters the health sector. Under the various estimations of statistical tests, one simple t-test shows female student result t value is less than the sig level of $-.6950.5$. The null hypothesis is rejected as there is a significant difference among female education graduations, which has an impact on the health sector as well, but male graduations are inverted. On the other hand, the study was prepared through numerical data by using SPSS software.

REFERENCES

- [1] Alemi, Q., Stempel, C., Baek, K., Lares, L., Villa, P., Danis, D., & Montgomery, S. (2016). Impact of postmigration living difficulties on the mental health of Afghan migrants residing in Istanbul. *International Journal of Population Research*, 2016.

- [2] Blum, R. W., Li, M., Pasha, O., Rao, C., & Natiq, K. (2019). Coming of age in the shadow of the Taliban: Education, child marriage, and the future of Afghanistan from the perspectives of adolescents and their parents. *Journal of Adolescent Health, 64*(3), 370-375.
- [3] Braakmann, N. (2011). The causal relationship between education, health and health related behaviour: Evidence from a natural experiment in England. *Journal of Health Economics, 30*(4), 753-763.
- [4] Brunello, G., Fort, M., Schneeweis, N., & Winter-Ebmer, R. (2016). The causal effect of education on health: What is the role of health behaviors?. *Health economics, 25*(3), 314-336.
- [5] databank.worldbank.
- [6] Feinstein, L., Sabates, R., Anderson, T. M., Sorhaindo, A., & Hammond, C. (2006, March). What are the effects of education on health. In *Measuring the effects of education on health and civic engagement: Proceedings of the Copenhagen symposium* (pp. 171-354). Paris, France: Organisation for Economic Co-operation and Development.
- [7] Fletcher, J. M., & Frisvold, D. E. (2009). Higher education and health investments: does more schooling affect preventive health care use?. *Journal of human capital, 3*(2), 144-176.
- [8] Galama, T. J., Lleras-Muney, A., & Van Kippersluis, H. (2018). The effect of education on health and mortality: a review of experimental and quasi-experimental evidence.
- [9] Groot, W., & Van Den Brink, H. M. (2007). The health effects of education. *Economics of Education Review, 26*(2), 186-200.
- [10] Groot, W., & Van Den Brink, H. M. (2007). The health effects of education. *Economics of Education Review, 26*(2), 186-200.
- [11] Hemat, S., Takano, T., Kizuki, M., & Mashal, T. (2009). Health-care provision factors associated with child immunization coverage in a city centre and a rural area in Kabul, Afghanistan. *Vaccine, 27*(21), 2823-2829.
- [12] <https://ourworldindata.org/human-development-index>
- [13] Iacopino, V., & Rasekh, Z. (1998). Education, a health imperative: The case of Afghanistan. *Health and Human Rights, 98-108*.
- [14] Kemptner, D., Jürges, H., & Reinhold, S. (2011). Changes in compulsory schooling and the causal effect of education on health: Evidence from Germany. *Journal of health economics, 30*(2), 340-354.
- [15] Leigh, J. P. (1983). Direct and indirect effects of education on health. *Social science & medicine, 17*(4), 227-234.
- [16] Leigh, J. P. (1983). Direct and indirect effects of education on health. *Social science & medicine, 17*(4), 227-234.
- [17] McNulty, C. A., Cookson, B. D., & Lewis, M. A. (2012). Education of healthcare professionals and the public. *Journal of antimicrobial chemotherapy, 67*(suppl_1), i11-i18.
- [18] moe.gov.af/database
- [19] Samar, S., Aqil, A., Vogel, J., Wentzel, L., Haqmal, S., Matsunaga, E., ... & Abaszadeh, N. (2014). Towards gender equality in health in Afghanistan. *Global public health, 9*(sup1), S76-S92.
- [20] Xie, S., & Mo, T. (2014). The impact of education on health in China. *China Economic Review, 29*, 1-18