DETERMINING THE ASSOCIATION BETWEEN ACCESS TO HEALTH AND SUBJECTIVE WELL-BEING IN PAKISTAN

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Abstract

This paper is focused on determining the association between access to health (independent variable) and subjective well-being (dependent variable). The study is quantitative in nature. The data was collected from district Swat. The research design included a multistage sampling procedure. The region is divided into tehsils, union councils, and lastly, urban and rural settlement distribution. A sample size of 470 was selected. A structured interview schedule was used for taking primary information regarding the study objectives. The information that was gathered was then prepared for analysis by being coded and entered into SPSS software version 25. Statistical tests including univariate, bivariate, and multivariate analyses were applied to the data. the study found that the affordability of medicine, access to health services, affordable primary care doctors' prevalence, and affordable hospitals were tumbling factors that further deteriorated the health status of the inhabitants. The study recommends that Health services can be made more accessible by connecting people via internet porters and providing basic care via telemedicine.

Key words: *Access to health; subjective well-being, association, Swat*

INTRODUCTION

It is well known that subjective well-being is associated with physical health. Individuals with robust physical health typically have a greater subjective well-being than those with poor physical health. According to one study, there is a direct association between depression and life stress and premature death, an increase in diabetes and coronary heart disease, and the onset of other chronic conditions (Steptoe, 2006). The study suggested that older adults engage in continuous physical exercise to minimize their risk of cardiovascular disease and boost their metabolism, which leads to a healthy life. Moreover, the study indicated that regular physical activity increases muscular strength and flexibility, which are highly connected to health and wellness (Windle *et al.,* 2010).

Likewise, a study of 523 men and women found that those with chronic illnesses had significantly lower levels of both hedonic and eudemonic well-being (Wikman et al., 2011). According to multiple studies (Steptoe *et al.,* 2005; 2008), a medical study found that poor daytime cortisol production is the primary factor in elevated subjective well-being. The purpose of Law's (1998) research on occupational health and happiness was to determine if and in what ways a person's line of work can affect his or her general health and happiness. Twenty distinct studies from the disciplines of health and social sciences were analysed using a variety of methodological overview strategies. According to the findings of these studies, a person's occupation can have a moderate to substantial impact on their health and happiness. Due to the fact that the vast majority of this research has been conducted on people without disabilities,

additional research is required to evaluate the relationship between work and health and well-being for people with disabilities whose impairments impact their daily jobs.

Moreover, Diener *et al.* (2012) investigated the impact of subjective well-being on health. It analysed whether subjective well-being (subjective well-being) can have an effect on health, why this might occur, and the circumstances in which this is more or less likely to occur. The result was that subjective well-being can occasionally affect health, and some of the reasons why are discussed. Additional research approaches include crosscultural research, animal studies, and experimental therapies aimed at enhancing long-term subjective well-being and assessing their effects on physical fitness. This area of research is unique because it has both potentially very important findings and fundamental research questions and issues.

MATERIALS AND METHODS

The current study utilized a cross-sectional research approach. Taking a cross-section of the population, the cross-sectional research design is the ideal method for determining people's impressions of an actual phenomenon, problem, or issue. In addition, a quantitative research approach was used to conduct this study.

According to Chaudhry's and Kamal formula for determining sample size, the required sample size for a total population of 214,713 was 470. This number was determined based on the formula (Chaudhry and Kamal, 2009). Using the formula developed by Bowley (1926) for proportionate allocation, the final sample size of 470 people was split equally between the several union councils that had been chosen in accordance with the population of those union councils. The primary data was acquired from household head above the age of eighteen (18) years in their respective union councils.

A structured interview schedule was used for taking primary information regarding the study objectives. Prior to data collection, ambiguities and inconsistencies were removed through the use of a pre-test interview plan. The researcher told both male and female data collectors how to gather information in the study's world. Furthermore, the independent and dependent variables were cross-tabulated to find the association between the independent and dependent variables.

The information that was gathered was then prepared for analysis by being coded and entered into SPSS software version 25. Statistical tests including univariate, bivariate, and multivariate analyses were applied to the data.

RESULTS AND DISCUSSION

Univariate Analysis

Perceptions of respondents regarding Access to health services

Governments have tried to promote subjective well-being by increasing public health because people value health, happiness, and life satisfaction (Diener and Chan, 2011). These programmes assume health and subjective well-being are linked. Although this is assumed, the degree of the health status-subjective well-being relationship is unknown. Thus, health-focused initiatives may not boost subjective well-being. The meta-analysis could address methodological and conceptual issues in the scientific literature as well as the strength of the health-subjective well-being relationship. Table-1 showed that a majority, i.e., 61.3% of the respondents, were satisfied with access to health care and medicines, and 38.7% were not satisfied with access to health care and medicines. On the basis of these findings, it may be concluded

that access to health care is a fundamental right of all citizens, regardless of gender, ethnicity, race, or religion. However, in the area under study, all health services were dysfunctional and did not contribute to the health of the community or local residents. Thus, many people face barriers to accessing health care, which may raise the risk of poor health outcomes and social inequality. Unequal health insurance coverage causes health inequities (Call *et al.,* 2014; Institute of Medicine US, 2002).

Moreover, 61.3% of the respondents were satisfied with the affordability of medicines, and 38.7% were not satisfied with the affordability of medicines. These results were consistent with those of the previous study. In addition, due to the prevalence of poverty in the research area, neither patients nor study participants could afford medicines or other forms of treatment. Sehat Insaf cards, which are insurance cards for the local people, could help improve their health even more. This means that the government needs to do more to help people get free medicine and care.

Furthermore, 58.5% of the respondents were satisfied with the affordability of hospitals, and 41.5% of the respondents were not satisfied with the affordability of hospitals. Additionally, increasing health service access reduces health inequities. Affordable health insurance is part of the solution, but economic, social, cultural, and geographic barriers to health care and new strategies to improve delivery must also be investigated (Call *et al.,* 2014; Green *et al.,* 2013). Barriers to health care need more research to be understood. This will help public health efforts to deal with access as a social determinant of health.

Table-1 further explored that a majority of 61.5% of the respondents agreed with the statement, i.e., are you satisfied with the affordability of a specialist doctor, and the remaining 38.5% were dissatisfied with the affordability of a specialist doctor in the study area. The health of the local population is deteriorating due to the absence of medical doctors in the study area, which is not a sign of a healthy nation. Specialists at each government hospital will ensure the health of local participants, paving the way for the nation-building process to proceed on a sustainable basis. These results were in line with Harrison *et al.,* (2020) disclosure that an insufficient amount of doctor prevalence led to detrimental health. Right now, in the study area, they only have one doctor, and he has to treat over 300 patients per day; that is a lot of work.

Moreover, 61.3% of the respondents were satisfied with the affordability of primary care doctors, and 38.7% were dissatisfied with the affordability of primary care doctors. These results were also in line with Thaddeus and Maine (1991), who disclosed that it is also feasible that the perceived impediments to proper health care access, including perceptions of the quality of care provision, can emerge in the health seeking behaviour of individuals with disabilities in this environment. Further, 64.7% of the respondents were aware of the quality of care and medicine, and 35.3% were not aware regarding quality care and medicine. It could be inferred from such findings that quality care and medicine are one of the ingredients of health. However, a lack of knowledge may deteriorate the health status of people. These results were also in line with Thaddeus and Maine (1991). It is also feasible that the perceived impediments to proper health care access, including perceptions of the quality of care provision, can emerge in the health seeking behaviour of individuals with disabilities in this environment.

Lastly, table-1 further explored that 60.6% of the respondents were satisfied with the transportation costs, whereas 39.4% were not satisfied with the transportation costs. Transportation is one of the major concerns during access towards a hospital. Patients in the research area may have worse health because they live in rural areas that are hard to reach and have poor infrastructure. Syed *et al.* (2013) say that bad or inconsistent transportation can make it hard to get to health care regularly and can lead to bad health outcomes. Studies show that not being able to move around could cause patients, especially those

from disadvantaged groups, to delay or skip medicine, change or miss appointments, and put off getting care. Aside from transportation restrictions and exclusion, the late-stage appearance of certain medical conditions, such as breast cancer, is linked to the late-stage appearance of certain medical conditions (Dai, 2010).

Table-1

Frequency and Percentage distribution regarding Access to health ervices

S.No	Statement	Yes(%)	No(%)
1)	Are you satisfied with access to health care and medicines	288(61.3)	182(38.7)
2)	Are you satisfied with affordability of medicines	288(61.3)	182(38.7)
3)	Are you satisfied with affordability of Hospital	275(58.5)	195(41.5)
4)	Are you satisfied with affordability of Specialist doctor	289(61.5)	181(38.5)
5)	Are you satisfied with affordability of primary care doctor	288(61.3)	182(38.7)
6)	Are you aware of the quality of care and medicines	304(64.7)	166(35.3)
7)	Are you satisfied the consultation of the doctors	310(66.0)	160(34.0)
8)	Are you satisfied with the transportation costs	285(60.6)	185(39.4)

Source: Survey, 2022

BIVARIATE ANALYSIS

Association between access to health services and Subjective well-being in rural communities

Governments and politicians worldwide are tasked with improving subjective well-being with limited resources (Diener and Chan, 2011; Stiglitz *et al.,* 2009). Identifying key subjective well-being factors influences investment decisions (Stiglitz *et al.,* 2009; Fleche *et al.,* 2011). Health, happiness, and life satisfaction are the ingredients of a happy life (Diener and Chan, 2011), and governments have tried to improve subjective well-being through boosting public health (e.g., by improving health care). These programmes assume health and subjective well-being are linked. Despite this assumption, the strength of the link between health status and subjective well-being is unknown, and therefore, actions focused only on health status may not optimise subjective well-being. Meta-analysis could look at methodological and conceptual limits in the scientific literature. for example, it's not clear how much health status affects subjective well-being, so this could help find out. Table-2 showed the overall attributes of subjective well-being while associating them with access to health statement through the application of chi-square test statistics as follows.

A non-significant (P=0.361) association was found between subjective well-being in rural communities and whether you are satisfied with access to health care and medicine. On the basis of these findings, it

may be concluded that access to health care is a fundamental right of all citizens, regardless of gender, ethnicity, race, or religion. However, in the area under study, all health services were dysfunctional and did not contribute to the health of the community or local residents. Consequently, many individuals experience hurdles that prohibit or limit their access to necessary health care services, which may increase the likelihood of poor health outcomes and health disparities. The unequal distribution of health insurance coverage relates to health disparities (Call *et al.,* 2014; Institute of Medicine US, 2002). Medical debt is prevalent among both insured and uninsured individuals. People with low incomes often don't have health insurance, and more than half of the uninsured are people of colour (Hidley, 2004).

Moreover, a non-significant (P=0.361) association was found between subjective well-being in rural communities and whether you are satisfied with the affordability of medicines. These results were consistent with those of the previous study. Patients and study participants alike were unable to obtain necessary medical care because of the high rates of poverty in the study location. Sehat Insaf cards, a sort of insurance, could help the local population live healthier lives, but the government still needs to step in and ensure that everyone has access to the healthcare they need.

Moreover, a non-significant (P = 0.021) association was found between subjective well-being in rural communities and whether you are satisfied with the affordability of hospitals. These results were consistent with the previous results. More people having access to healthcare would also help reduce health inequities. Part of the solution is inexpensive health insurance, but we also need to examine the economic, social, cultural, and geographic barriers to health care and find new strategies to increase the effectiveness of health care delivery (Call *et al.,* 2014; Douthit *et al.,* 2015). More research is needed to fully understand these problems, and the information that comes out of it will help public health programmes that try to make health services easier to get to.

Likewise, a non-significant association was detected between subjective well-being in rural communities and whether you were satisfied with the affordability of a specialist doctor (P=0.874). The lack of medical professionals in the area under consideration is having a negative impact on the health of the local population. The health of local participants will be monitored by specialists at each government hospital, allowing for a more durable foundation for the nation-building process to take place. These findings were corroborated by Harrison et al.'s qualitative research, and participant interviews confirmed that the health care facilities our sample was able to access were staffed by poorly trained medical professionals, with one respondent saying, "Right now we only have one doctor, and he has to treat over 300 patients a day; that is a lot of work." In addition, a association between subjective well-being and contentment with primary care costs was found, but it was not statistically significant (P=0.361). These findings struck a chord with the earlier ones as well.

Notwithstanding, a significant (P=0.003) association was ascertained between subjective well-being in rural communities and whether you are aware of the quality of care and medicine. These results were also in line with Thaddeus and Maine. (1991), it is also feasible that the perceived impediments to proper health care access, including perceptions of the quality of care provision, can emerge in the health-seeking behaviour of individuals with disabilities in this environment.

Lastly, a significant (P=0.002) association was found between subjective well-being in rural communities and whether you are satisfied with the transportation costs. In accordance with the findings of Syed *et al.* (2013), cumbersome or unreliable transportation can impede consistent access to health care, thereby contributing to adverse health outcomes. Similarly, studies have demonstrated that a lack of mobility can result in patients, particularly those from vulnerable communities, delaying or skipping medication, rescheduling or missing appointments, and delaying care. In addition to transportation

constraints and residential segregation, the late-stage presentation of some medical disorders (breast cancer) is connected with the late-stage presentation of certain medical diseases (Dai, 2010).

Table-2 Association between access to health services and subjective well-being in rural communities

Access to Health Service	Indexed Variable	Statistics X^2 & P value
Are you satisfied with access to health care and medicines	subjective well-being in rural communities	X^2= 0.834 P=0.361
Are you satisfied with affordability of medicines		X^2= 0.834 P= 0.361
Are you satisfied with affordability of Hospital		X^2= 5.343 P= 0.021
Are you satisfied with affordability of Specialist doctor		X^2= 0.025 P= 0.874
Are you satisfied with affordability of primary care doctor		X^2= 0.834 P=0.361
Are you aware of the quality of care and medicines		X^2= 4.04 P=0.004
Are you satisfied the consultation of the doctors		X^2= 145.275 P=0.000
Are you satisfied with the transportation costs		X^2= 9.637 P= 0.002

Association between access to health services and subjective well-being

People rank health, happiness, and life satisfaction as some of the most important requirements for a successful life; as a result, governments have attempted to improve subjective well-being as much as possible by improving public health (e.g., by improving health care). These efforts are predicated on the assumption that subjective well-being and the health state are intricately connected to one another. In spite of this assumption, the strength of the link between health status and subjective well-being is uncertain. as a result, initiatives that aim just to improve health status may not be the most effective way to maximise subjective well-being. A highly significant (P=0.000) association was found between access to health and subjective well-being in rural communities. The association between one's health state and one's subjective well-being was significantly strengthened when the former was conceptualised as life satisfaction rather than happiness. Studies have found a association between one's health status and their level of life satisfaction; this finding is consistent with those findings. Research reveals that life satisfaction is more consistent than happiness across time (despite the fact that many studies continue to operationalize subjective well-being exclusively in terms of people's happiness (Fleche *et al.,* 2011). In addition, there is a robust relationship between contentment with one's life and physiological markers that are thought to indicate positive states of mind. Diener *et al.* (2013) say that if you were to use a metric, you could give life satisfaction more weight than happiness.

Table-4 Association between access to health services and subjective well-being

Indexed Independent variable	Indexed Dependent variable	Chi-square and P value
Access to health	subjective well-being in rural communities	X^2=31.397(0.000)

Source: Survey, 2022

MULTIVARIATE ANALYSIS

Association between access to health services and subjective well-being in rural communities (controlling marital status)

Results in table 4 disclosed that for married people, the association between access to health and subjective well-being in rural communities showed a significant association (P=0.002) with a non-spurious relationship. However, for unmarried people, the association between access to health and subjective well-being in rural communities showed a non-significant association (P=0.120) with a spurious relationship. These findings were also supported by Cao *et al*. (2016), who discovered that married individuals have a generally more positive appraisal of their subjective health, emotional feelings, and social well-being than divorced or single individuals due to their greater economic resources and greater social support.

Table-4

Association between access to health services and subjective well-being in rural communities (controlling marital status)

Marital Status	Independent Variable	Dependent variable	Chi-square and P value
Married	Access to health services	subjective well-being in rural communities	χ^2 =9.961(0.002)
Unmarried	Access to health services	subjective well-being in rural communities	χ^2 =2.421(0.120)

Source: Survey, 2022

CONCLUSION AND RECOMMENDATIONS:

With regards to access to health services satisfaction, the study found that the affordability of medicine, access to health services, affordable primary care doctors' prevalence, and affordable hospitals were tumbling factors which further deteriorated the health status of the inhabitants. However, consultation with doctors, transportation costs, and awareness regarding quality of care and medicine due to literacy were boosting their health status. The most critical step toward subjective well-being is to improve one's health. It was also easy to believe that healthy individuals would be happier than unhealthy individuals. In this instance, the government should increase health-care access by allowing people to use health-insurance cards such as the *Sehat Insaf Card*. Communities should also be provided with basic health knowledge about new diseases so that they can protect themselves and provide basic care when necessary. This was the day's agenda. Health services can be made more accessible by connecting people via internet porters and providing basic care via telemedicine.

REFERENCES

[1] Call, K. T., McAlpine, D. D., Garcia, C. M., Shippee, N., Beebe, T., Adeniyi, T. C., & Shippee, T. (2014). Barriers to care in an ethnically diverse publicly insured population: is health care reform enough?. *Medical care*, 720-727.

[2] Cao, X., 2016. How does neighborhood design affect life satisfaction? Evidence from Twin Cities. Travel Behav. Soc. 5, 68–76. https://doi.org/10.1016/j.tbs.2015.07.001.

[3] Dai, D. (2010). Black residential segregation, disparities in spatial access to health care facilities, and late-stage breast cancer diagnosis in metropolitan Detroit. *Health & place*, *16*(5), 1038-1052.

[4] Diener, E., Chan, MY. Happy people live longer: subjective well-being contributes to health and longevity, Appl Psychol Health Well Being, 2011, 3:1–43

[5] Diener, E., Oishi, S., & Lucas, R. (2012). Subjective well-being: The science of happiness and lifesatisfaction. In S. J. Lopez & C. R. Snyder (Eds.), The Oxford Handbook of Positive Psychology (2 ed., pp. 63-73).

[6] Fleche, S., Smith, C., & Sorsa, P. (2011). Exploring determinants of subjective well-being in OECD countries: Evidence from the World Value Survey (No. 921). *OECD Publishing. http://dx. doi. org/10.1787/5kg0k6zlcm5k-en. Gray BJ et al., (2019) Employment status and impact on mental well-being in the UK working age population: a cross-sectional analysis. The Lancet*, *394*, S44.

[7] Green, L. V., Savin, S., & Lu, Y. (2013). Primary care physician shortages could be eliminated throughuse of teams, nonphysicians, and electronic communication. *Health Affairs*, *32*(1), 11-19.

[8] Steptoe A, ed. Depression and Physical Illness. Cambridge: Cambridge University Press; 2006.

[9] Stiglitz, J. E., Sen, A., & Fitoussi, J.-P. (2009). Report by the Commission on the Measurement of Economic Performance and Social Progress. Paris: INSEE.

[10] Syed, S. T., Gerber, B. S., & Sharp, L. K. (2013). Traveling towards disease: transportation barriers to health care access. *Journal of community health*, *38*(5), 976-993.

[11] Thaddeus, S., & Maine, D. (1991). Too far to walk: maternal mortality in context. *Newsletter (Women's Global Network on Reproductive Rights)*, (36), 22-24.

[12] Wikman A, Wardle J, Steptoe A. Quality of life and aff ective well-being in middle-aged and older people with chronic medical illnesses: a cross-sectional population based study. PLoS One 2011; 6: e18952

[13] Windle G, Hughes D, Linck P, Russell I, Woods B. Is exercise eff ective in promoting mental well-being in older age? A systematic review. Aging Ment Health 2010; 14: 652–69.