Assessment Of The Connection Between Depression And Health Issues Among The Older Generation

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ABSTRACT

More age brings more issues and requires more health facilities. Most of the people in Pakistan live in rural areas and some of them do not have access to health facilities. Health information system help to collect relevant information form patients. The aim of this study is to investigate the impact of factors which influence depression among senior citizens. For this purpose data from 87 respondents was collected using self-administered questionnaire. Non probability convenience sampling was used. Correlation and regression analysis was run to test hypotheses.

Keywords: Assessment, Connection, Depression, Health Issues & Older Generation

INTRODUCTION

Ibrahim, Ai-Lami, Al-Rudainy, and Khader (2019) reported that 10–20% of elderly people worldwide experience mental health problems. It is estimated that 52% of all mental disorders are established by age of 48 and 65% by the age of 55 ((Ibrahim et al., 2019; Kim-Cohen et al., 2003). The most common disorders in elderly people are generalized anxiety disorder and depression, respectively (Stansfeld et al., 2016). In recent days, level of depression and anxiety among older people increasing rapidly while living in isolation and far away from their ancestors (Robb et al., 2020). There is substantial change seen in the health system of developing economies. The digitalization has brought major shift in the paradigm. Digitalization has number of benefits but on the other hand it has disadvantages as well. Extensive use of scree i.e. smartphones increases anxiety, depression, and stress among elderly individuals (Alhassan et al., 2018). In centralized health system focus was given to mortality and morbidity in which patients got referrals from individuals' health units to district and then national level (Gladwin, Dixon, & Wilson, 2003).

Further, decentralization brings more authority, quick and quality decision making and efficient use of data and information, timely dissemination of information to professionals (Bai, Luo, Zhang, Wu, & Chi, 2020). Healthcare professionals are independent to make decisions with more care, responsibility and enhanced skills are required to handle decentralized system (Kuhn & Giuse, 2001). In order to provide quality health services, health professionals and healthcare organizations (HCOs) should have adequate resources to share information timely is only possible through advance and improved

system. This is only possible through digitalization, electronic health record (EHRs); electronic medical records (EMRs), electronic patient records (EPRs) etc. organizations have to focus on advance information communication technologies (ICTs). One cannot completely deny the significance of paper based information (Organization, 2004).

The use of health information system (HIS) to investigate level of depression is limited. The critical success factors for suces of project are political, social factors are held responsible for success of any project while 20% factors responsible are purchase and installation of software and hardware (Oliveira et al., 2019; Kuhn& Giuse, 2001). Through use of technology fraud, illegal money and bribery would become visible and help government to successfully implement the project. According to WHO identified the weak points and areas of district health system (DHS). According to Evans et al., 2018; Gladwin et al., (2003) continuous improvements in the national information system could produce better outcomes. In developing economies financial constraints are one the main issue to implement advance technology in healthcare organizations (HCOs) (Bai et al., 2020).

Figure 1 Symptoms of Depression
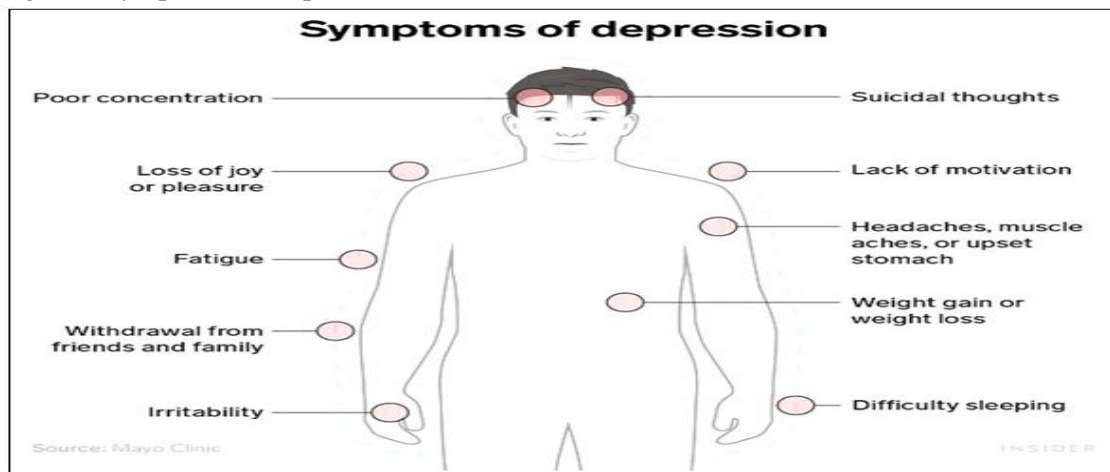
Problem Statement
Majority of the population of Pakistan is living in rural areas and most of them never visited the health facility in their whole life. Through use of telemedicine or e-health it could be possible to provide health care to remote areas especially senior citizens who develop clear signs of depression among them, with increase in age more health facilities are required. The current study would investigate the problems of senior citizens and findings of the existing study would be helpful for policy making.

Objectives & Significance
1. To identify the relationship among predictor and criterion variables
2. To investigate the factors affecting depression among older generation

Hypotheses of Study
H_1 Predictors are Highly Correlated with Criterion Variables
H_2 Decision-making is predicted by All the Predictors

LITERATURE REVIEW
In this chapter, we emphasize on definition of health management, by first describing the use of health care, its essential factors to be identified, then introducing descriptions used for each factor in health care on the basis of available literature and then finally concluding the research gaps found in previous literature and incorporate into our study with the objectives mentioned in the previous section in most systematic manner.

Mental Health Issues of Senior Population
Use of telemedicine and e-health could save cost, time, and efforts and making quick and quality decision, dissemination of information to relevant professionals would be quick. Use of scree and spending more time on social media has several consequences such as mental health issues, psychological problems among individuals. One can compare his/herself with low performers and high performers through lens of social comparison theory to investigate level of depression, anxiety and stress (Festinger, 1954; Myers & Crowther, 2009; Seabrook, Kern, & Rickard, 2016; Appel, Gerlach, & Crusius, 2016)

Hc delivery
Use of E-health, telemedicine and electronic health records (EHRs) can save time, money, cost effective but HCOs need to investigate the readiness of primary healthcare centers as well as general and specialist hospitals whether they are ready to adopt this change or not. The main problem in implementing this issue is financial budget, Ministry of Health (MoH) has to provide enough and sufficient budget to all HCOs. Once the new system is installed it will reduce waiting times for patients for their appointments, save time for travel and waiting in long ques. Health professionals can send only relevant information to physicians on time (Chetley et al., 2006). Those workforces who are isolated or working in remote areas could be benefited from the use of E-health. They can get latest information, share the knowledge with their colleagues, they can save important heath related data. The gather data could be useful for professionals learning and experience. Telemedicine can be used for all health related purposes. Health system is totally different from other sectors such as economic, commerce etc. due to nature of data i.e. automation of patients' records, biomedical results, medical codes, makes it different and complex.

HMIS
Continuous monitoring of health-related activities are essential in regular intervals. An efficient and effective system is required which help professionals to collect and analyze data. The outcome might be different depends upon nature of data. This system is called health management information system and it has two elements one is patient and other is hospital management information system. These systems can store all relevant data of hospitals' and patients. The nature of data might be periodic or routine. Periodic data includes surveys and cost effective as compared to routine data is expensive. Developing economies cannot afford burden of financial issues to install telemedicine or e-health. General hospitals in Pakistan collect routine data like TB, Malaria. Lady health worker program (LHW), DOTS and EPI, outpatient department (OPD) etc. as discussed above majority of the population living in rural areas approximately 80%. They cannot reach HCOs. It implies to install EHRs to get access to those patients and their data as well and people will get health facilities as well (Theo Lippeveld, Sauerborn, Bodart, & Organization, 2000).

Routine HIS
Data collected at regular intervals is called routine data. This data is generally collected by health workers such as TB, malaria, communicable and non-communicable diseases. It might be collected on paper. Printed forms are available at reception of HCOs. Aim of this information is to investigate the pattern and trends of diseases (Theo Lippeveld et al., 2000). Employees in hospitals daily collect and store information taken from patients on daily basis. This data is collected on printed forms, and stored in registers; this data is useful in monitoring the trends of diseases in general public or specific population. Researchers and experts disagree that data collected on routine basis in developing economies is inappropriate and not adequate. This data is not useful to make quality decisions(Lorenzi, Riley, Blyth, Southon, & Dixon, 1997). (Wilson, McKeown, & Bhattarai, 2001)

ICTs
Collecting, storing and sending data through

electronic means is called ICTs (Heeks (1999). It consists of expertise of professionals installing software, hardware, books, etc. use of ICTs have great influence on health outcomes. These technologies help to control and prevent communicable and non-communicable diseases. There are three factor which play important role one is continuous educating of workers, and learning 2nd is use of new system to provide services to remote areas by doctors, thirds is transparency and efficient governance (Chandrasekhar & Ghosh, 2001). Non availability of trained staff, and inadequate resources are also problems in the way of quality health services.

Decentralization & Significance

In some countries routine data collection is planned and well managed. An instrument used for data collection and reporting of information is designed by local experts. Decentralization is one of the beneficial strategies adopted by HCOs. It improves health quality. In decentralization most of the activities are carried out by management team of district health (TJCPC Lippeveld, 2001; Hutchinson, 2002). The significance for proper and adequate decentralization in health system needs focus of WHO. It is mainly One cannot deny the importance of health information system. It helps in planning of health related activities. Collection of data and its sharing. Professionals can easily identify the ratio and percentage of death and morbidity. Trends and patterns of different diseases in the communities can easily be identified. In Pakistan DHIS is efficient tool for health planning and management. It brings better outcomes, better performance of employees. In Pakistan there are various challenges faced by HCOs.

Figure 2 Theoretical Framework
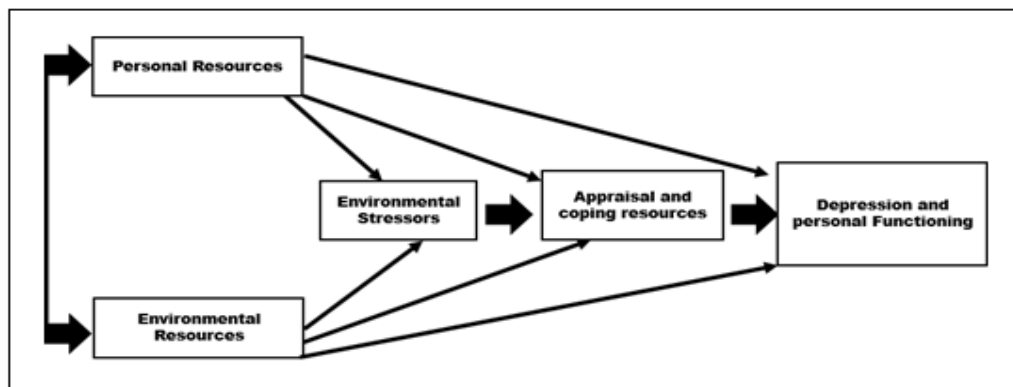
RESEARCH METHODOLOGY

"A research design or research methodology is set up to decide on among other issue how to collect further data, analyze and interpret those data and, finally to provide answer to problem" (Sandiford, Annett, & Cibulskis, 1992).The aspects concerned with the methodology of the study "to find out the level of depression and anxiety among elderly people for their peaceful life" to reach the conclusion of study in systematic manner.

Research Design

The current study is quantitative in nature and primary data i.e. cross sectional was collected form the respondents. As survey has several benefits such as cost and time effective, most of the scholars used this strategy are social and health sciences(Yin, 1994; Babbie, 1989). The one of the most effective to measure behavior and attitude of respondents is survey (Bougie & Sekaran, 2019)

Population & Sample

Population of the existing study is senior people from Dera Ismail Khan City of KPK Pakistan. Total 87 participants participated in this study. Non probability convenience sampling technique was used and 150 questionnaires were distributed among senior citizens. Total 87

completed questionnaires were received.

Data Collection & Analysis Methods:

Descriptive statistics in which frequency, percentage were used. While to test hypotheses correlation and regression analysis were used. SPSS version 26 was used.

DATA ANALYSIS

Data analysis is a process of gathering, modeling, and transforming data with the goal of highlighting useful information, suggesting conclusions, and supporting decision making.

Table 1 Personal Resources Breakdown Viz Trained and Untrained

Variables	Characteristics	n	%
Training	Trained	43	53.1
	Untrained	44	46.9
Preparation	Trained	43	63.2
	Untrained	44	36.8
Stress Factors	HCS	43	56.8
	HCS Facilities	44	44.2
Appraisal Resources	HCS	43	52.8
	HCS Facilities	44	48.2
Employees status	HCS	43	53.8
	HCS Facilities	44	46.2

Testing of the Hypotheses

Association between Predictors & Criterion Variables (H1) Hypothesis: 1 Predictors are Highly Correlated with Criterion Variables

Table 2 Correlations Analysis (n=87)

Variables	Mean	S.D	1	2	3	4
DCR	3.96	0.83	1			
DP	3.72	0.87	.872**	1		
RG	3.92	0.89	.852**	.779**	1	
DM	3.65	0.86	.679**	.689**	.654**	1

**. Correlation is significant at the 0.01 level (2-tailed).

The relationship between DCR and DP was (r=0.872** p<0.01); DCR and RG was (0.85***, p<0.01) DCR and DM (0.67***, p<0.01) relation between DP and RG (0.779**, p<0.01); DP and DM (0.689**, p<0.01) and RG and DM (0.654**, p<0.01) respectively. H1 is substantiated.

Table 3 Regression Analysis

D.V	I.V	R	R^2	Adjusted R^2	β	t	p
DP	Constant	.738	.535	.484		2.066	.053
	DCR				.177	.884	.430
	DA				.367	2.190	.032
	RG				.217	1.344	.185

The R^2 of 0.5350 explained 53.5% variance upon DP by predictors highest dominant factor was

emerged as DA on the basis of highest beta value. Therefore H2 is accepted.

CONCLUSIONS

This study provided valuable contribution on depression, and use of telemedicine. Old people developed more depression symptoms and had more physical and mental health issues. To the best of the researchers' knowledge this is one of the pioneer studies on e-health and telemedicine in Pakistan. This study has opened doors for new research on mental health of elderly people. The very important step is to provide financial budget by the government to MoH for successful implementation of EHRs. Once the e-health project is successfully implemented it would bring several benefits to professionals as well as general population. Saving of time, cost, efforts, and long line ques, optimum health services provision to patients, increase level of satisfaction for patients and health professionals. Quality decision making and sharing relevant data to physicians on time.

Suggestions for Future Research

1. Government should formulate policies for e-health
2. Proper and adequate training must be given to all health professionals to use EHRs, E-health systems.

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