IMPACT OF SOCIAL DETERMINANTS ON PERCEIVED HEALTH COMPETENCE OF PATIENTS MANAGING CHRONIC ILLNESSES

Mahnoor Hamza[1], Saira Maqsood[1], Fatima Salman[1], Fatima Naeem[1], Muhammad Farhan Tabassum[2,3*]

[1]Department of Psychology, Lahore Garrison University, Lahore, 54000, Pakistan.
[2]Department of Sports Sciences & Physical Education, Faculty of Allied Health Sciences, University of Lahore, Lahore, 54000, Pakistan.
[3*]Depaertment of Mathematics, University of Management and Technology, Lahore, Pakistan.

[*]**Corresponding Author:** Muhammad Farhan Tabassum,
farhanuet12@gmail.com

Abstract:
Healthcare is vital as people get ill, emergencies, accidents may arise, and healthcare is necessary to diagnose, tackle and manage such critical situations. Often people have chronic diseases and they have to face different challenges regarding their illness, they have different social needs whose fulfillment can lead to improved health competence in patients. This study aims to assess the impact of perceived compassionate care from doctors and social support on perceived health competence of patients managing chronic illnesses. To determine the moderating effect of social support in relationship between perceived compassionate care and perceived health competence in patients, a correlational study with purposive sampling technique was carried out. Total 150 patients were recruited who having chronic illnesses and managing them by regular follow up. To get responses from patients standardized measurement instruments were used, as patient perceived compassionate healthcare scale (Rodriguez & Lown, 2011), Duke Functional Social Support questionnaire (Broadhead et all, 1995), perceived health competence scale (Smith & Wallston, 1998). Descriptive analysis, reliability analysis, correlation analysis and moderation analysis were done. Results shown that there is significant positive correlation between patients perceived compassionate healthcare, perceived social support and patients' perceived health competence. Moderation analysis revealed that the coefficient of interaction is positive so it depicts that social support positively moderated the relationship between perceived compassion satisfaction and perceived health competence and it has additive effect. This study highlights the importance of doctor-patient relationship that how a satisfactory relationship can increase health competence of patients along with social support. Moreover, it is an indicator for doctors to be more compassionate with their patients to improve overall health outcome.

Keywords: Compassionate Care by Doctors, social support, Perceived Health Competence

Introduction
The treatment of every disease goes along with the number of psychological phenomena closely bonded with the personality of the patient and the doctor, as well as the applied therapeutic methods which produce both the positive and negative effects. Consideration of the psychological factors in

the medical process makes it possible to obtain a more appropriate assessment for the effectiveness of the treatment and prognosis. Assessment of the therapeutic dynamics in the somatic, psychological and social planes should be regarded as the most needed one.

American Psychological Association describes social support as the showing helping behavior or comfort to others, particularly to assist them manage with psychological, biological, and social problems. The aspect of caregiving and support is changing and this change improves the way care is provided whilst keeping self-respect, and giving esteem and compassion to people (Ford, 2017). Care, compassion, and effective communication are essential elements in doctor and patient relationships, which must be demonstrated by all doctors, nurses, and healthcare assistants in their role as caregivers (Bloomfield. Pegram, 2015)

In 2016 Gordon and Beresin emphasized that poor health results that includes objective feedback from patients or systematized subjective ratings by doctor that are examined after an interaction result from a disturbed patient-doctor connection when patients perceive themselves unheard, disregarded, or out of the cooperation from their doctors.

Compassion is defined as powerful urge or feeling of sympathy with another person's feelings of distress or sorrow, followed by a desire to comfort or help that person (APA, 2015). Feeling by another individual's suffering only is not concept of compassion but it also means to urge to help them in time of suffering. Compassion develops social interaction in children and adults. Social linking is vital to accommodative human functioning, as it is connected to higher self-esteem, well-being, empathy and greater interpersonal orientation (Seppala et al., 2013).

A research study indicated that job related expectations and psychosocial safety had significant positive relationship with self-efficacy. It depicts that if doctors feel safe psychosocially then they tend to be more satisfied with their job which will make them more compassionate towards their job that eventually result in better health outcome (Maqsood et al; 2023).

Perceived health competence is defined as the degree to which the specific is accomplished of effectively managing his or her well-being outcome (Wallston & Smith, 1995). Health outcome measures consist of three fields such as physiological objective measures, behavioral measures, and subjective measures. Physiological outcomes include blood pressure, serum glucose level, triglyceride level, and frequency of visits. The behavioral results include adherence to treatment, emotional status, functional status, and recovery. Subjective measures include global health position, knowledge, pain, fulfillment, and consideration (Butt et al; 2022).

In a recent study it is evaluated that the effect of perceived health competence, a patient's belief in his or her ability to achieve health-related goals, on health behavior and health-related quality of life. Researchers analyzed 2063 patients hospitalized with acute coronary syndrome and/or congestive heart failure at a large academic hospital in the United States. Multivariable linear regression models investigated associations between the two-item perceived health competence scale (PHCS-2) and positive health behaviors such as medication adherence and exercise (Health Behavior Index) as well as health-related quality of life (5-item Patient Reported Outcome Information Measurement System Global Health Scale). After multivariable adjustment, perceived health competence was highly associated with health behaviors and health-related quality of life. Low perceived health competence was associated with a decrease in health-related quality of life between hospitalization and 90days after discharge (Justin et al; 2016).

Objectives of the Study: 1) To examine relationship among perceived compassionate care satisfaction, perceived social support, and perceived health competence in patients managing chronic illnesses. 2) To investigate moderating role of perceived social support in relationship between perceived compassionate care satisfaction and perceived health competence in patients managing chronic illnesses.

Hypothesis of the Study: H₁ Perceived compassionate care satisfaction have significant positive relationship with perceived social support and perceived health competence in patients managing chronic illnesses. **H₂:** perceived social support would have significant moderating role in

relationship between perceived compassionate care satisfaction and perceived health competence in patients managing chronic illnesses.

Figure 1 *Hypothesized Model of the Research*
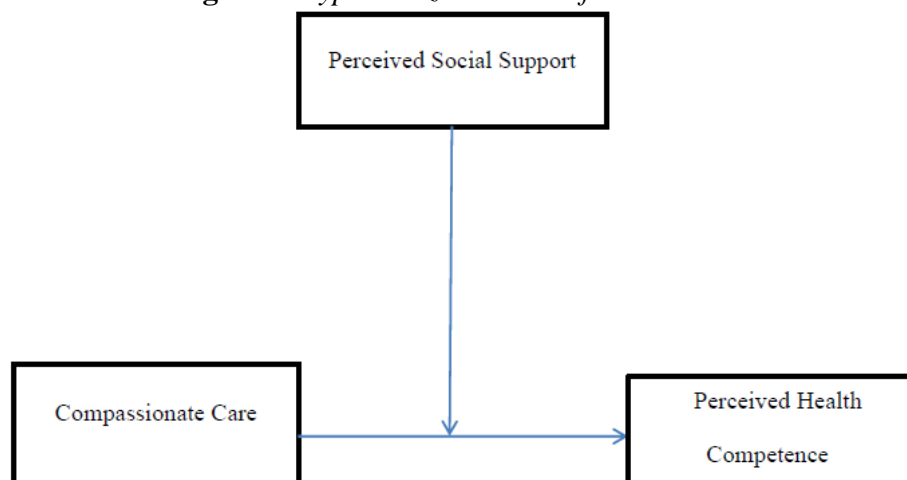
The Health Belief Model (HBM), Hochbaum Rosenstock (1950)

Materials and Methods

Research Design: The design used for conducting current study was correlational research design. Correlational research design is defined a method for exploring the relationships between variables of interest. (Fitzgerald, Rumrill & Schenker, 2004) and the aim of the current study is to find relationship among study variables.

Sample and Sampling Strategy: Sample was of 150 patients was recruited, which was sufficient for current study through Green's Purposive sampling strategy was used to collect responses from participants, as the purpose of study is to collect responses from patient who are managing chronic illnesses. Only diagnosed patients were taken with regular follow up from last 3 months. Patients who are taking treatment from both government and private medical hospitals were included. Patients who have minimum graduation qualification were taken. Those patients who ha terminate illnesses were excluded.

Assessment Measures: Following instruments were used to measure the variables

Demographic Performa: Demographic Performa consist age, disease duration, gender, qualification, follow-up schedule.

Schwartz Compassionate Care Scale: The 12-item Schwartz Center Compassionate Care Scale is a unidimensional scale with outstanding internal consistency and test-retest reliability. It is developed by Rodriguez and Lown in 2019. The 12-item Schwartz Center Compassionate Care Scale have questions linked to thoughtful and conversing emotional, and contextual matters and the patient needs and family needs. It can be easily completed online; it can also use for assessment on work-place and response to clinicians and performance or quality improvement.

Perceived Health Competence Scale (PHCS): This eight-item scale is adapted by the first author from a general measure from general measure of perceived competence. It was developed by Wallston and Smith in 1995. The instrument is short and easily filled. The scale items have high consistency from 0.82 to 0.90. PHCS has also high construct validity. It is 5point Likert scale from not at all to more often.

Duke Functional Social Support Questionnaire: It is a 15-item, self-administered, multidimensional, functional social support questionnaire developed by Broadhead in 1988. Its internal consistency was 0.87. In the original Duke-UNC scale there are six response options for each item ranging from "as much as I would like" to "much less than I would like". In the scale, items are scored using a four-point scale with 4 is "as much as I would like" and 1 is "never".

Procedure: Topic was approved from Departmental Board of Study, Lahore Garrison University. Permission was taken from authors to use their scales in study. Inform consent was taken and asked

their information will be kept confidential. The participants were informed before collecting the data that they can withdraw any time and it will be used for research purpose only. Participants were informed about their rights. 130-research questionnaire were distributed physically among students of private sector universities whereas 20 research questionnaires were also collected through Google form. Google link was sent to students of different universities through social media. After collecting the data, it was entered into SPSS-20 for the further analysis. Data was organized by demographic analysis and different statistical techniques were applied to test the hypothesis.

Ethical Considerations: In order to conduct this research, following ethical considerations were kept in mind.

- Informed consent form was taken from participants.
- No participant was forced to fill the questionnaire.
- Maintain anonymity and confidentiality.
- Accurate reporting of data was done.

Data Analysis and Results

The aim of current study is to examine relationship among perceived compassionate care satisfaction, perceived social support, and perceived health competence in patients managing chronic illnesses. For this purpose, Pearson Product moment Correlation Analysis was used. The second objective of the study is to investigate moderating role of perceived social support in relationship between perceived compassionate care satisfaction and perceived health competence in patients managing chronic illnesses. For this Hayes PROCESS with Model 1 was used.

Table 1 *Sociodemographic Characteristics of Participants (n= 150)*

Variable	N	%
Age		
20-35	141	89
36-60	09	11
Qualification		
Graduation	115	76
Masters	35	23
No of Follow Up		
Less than 5	34	22
Less than 10	57	38
Less than 15	59	40
Nature of Hospital		
Public	120	78
Private	30	20

Demographics shows more participants were from public hospitals. All were graduated and diagnosed patients. All patients continued their follow-ups.

Table 2 *Inter-correlations for Compassionate Care, Social Support and Perceived Health competence in patients*

	Variables	1	2	3
1	Compassionate Care	-	.900**	.570**
2	Social Support		-	.526**
3	Health Competence			-

**p<.01

Pearson product moment correlation was used to assess correlations between the variables. Results shown significant positive correlations between all the variables at .01 level. It depicts that if perceived compassionate care satisfaction in patient increases, social support also increases and if

social support increases health competence also increases. If compassion satisfaction increases in patients their health, competence also increases.

Moderation analysis was done through Hayes PROCESS to examine the interaction effect of social support in relation with independent variable compassionate care and dependent variable perceived health competence in patients managing chronic illnesses.

Table 3 *Moderation analysis examining the interaction effect between compassionate care and perceived health competency (N=150).*

| Variable	Perceived Health Competence			
	B	SE	95% confidence interval	
			ULCI	LLCI
Constant	1.23	3.93	_6.55	9.01
CC	.54	.16	.21	.87
SS	.28	.12	.03	.53
CC×SS	.05	.00	.01	.00
R^2	.34			
F	25.64			

Note: CC= Compassionate Care, SS= Social Support.

The interaction effect of perceived compassionate care in patients and social support has significantly predicted patient perceived health competence. The coefficient of interaction is positive so it depicts that social support positively moderated the relationship between perceived compassion satisfaction and perceived health competence and it has additive effect.

Figure 2 *Graphical Presentation of Moderation Analysis*
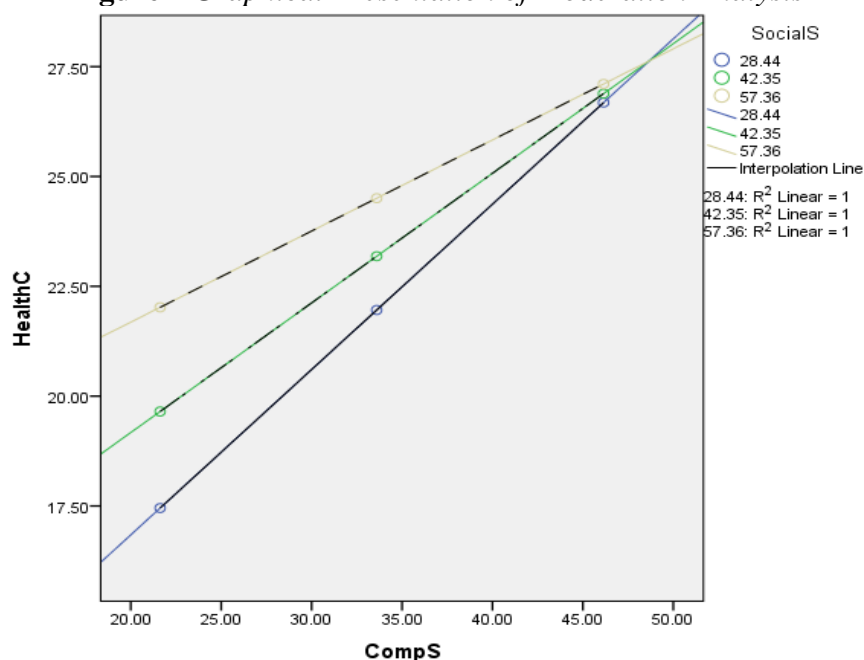
Plot showed significant moderation at lower and medium level of social support while at higher level of social support, interaction is insignificant. Which depicts that although social support increases health competence but it is not stronger than role of compassionate care in increasing patient perceived   health competence

Figure 3 Emerged model of research
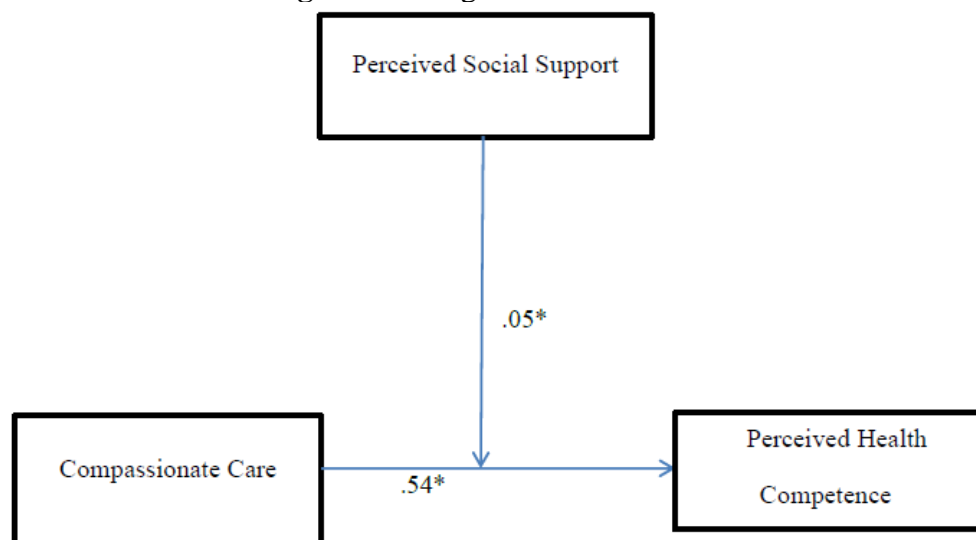
Discussions

Chronically ill patients face different challenges in life regarding their illness, individual have different social needs. If individual found these needs to be fulfilled then it can have a better impact on their health competence. This study was aimed to assess the role of perceived compassionate care from doctors and social support on patient is perceived health competence. Hypotheses I state that there is likely to be a significant relationship among perceived social support, perceived compassionate care satisfaction and perceived health competence in patients. Correlation analyses was done to assess the relationship between variables and results shown that perceived compassionate care, social support, and perceived health competence are positively correlated. A study was aimed to investigate the consequences of compassion and social support on psychological reactivity, results showed that when participants were given social support while doing the task, higher attribute concern was related with less psychological reactivity. Higher likeness for supportive evaluators was also associate with higher compassion (Brandon & Shanon, 2010).

In another study it was investigated that the association between perceived social support and health-promoting lifestyle in pregnant women. Results shown that pregnant women with better perception of social support had a better performance in adopting health-promoting lifestyle (Azita & Armin, 2021).

A study illustrated close ties between compassion and patient outcomes. When healthcare providers treat the patients with compassion and patient perceive it then they are more likely to take care of themselves by implementing provider's instructions (Artera, 2019). These all studies validate correlation analysis of this study thus hypotheses I is accepted.

Hypothesis II states that there is likely to be a significant moderating role of perceived social support in relationship between perceived compassionate care satisfaction and perceived health competence in patients. Moderation analysis was done to assess the moderating effect of perceived social support between perceived compassionate care and perceived health competence. Results shown the significant positive effect of perceived compassionate care on perceived health competence as nurses and patients report concern as a significant promoter of cooperative behavior between staff and patients aimed at attaining important care results (Vandercingel, 2011).

Compassion can serve different beneficial advantages in the health setup. Various benefits have been claimed for doing treatment of patients with compassion that included better patient health outcomes, increasing satisfaction of patient with treatment as well as upgrading caliber of data collected from patients. (Sanghavi, 2006).

In this study, social support moderated the relationship between perceived compassionate care and patient perceived health competence. A study was aimed to investigate the consequences of compassion and social support on psychological reactivity, results shown that when participants

provided with social support during the task, higher trait compassion was associated with lower psychological reactivity (Brandon & Shanon, 2010).

In recent researches perceived functional social support from patients' social networks, such as family members and friends, positively moderated the effect of perceived healthcare system and medication adherence of patients and enabled them to effectively cope with the disease (Shen et al; 2022). Social support is generally conceptualized and perceived as a positive source in chronic disease; research studies also proposed that adequate amount of social support can increase the health competence of patients. Above studies validated results thus second hypotheses is also accepted. So, in this study, the Both hypotheses have accepted which depicts that patient perceived compassionate care; social support and patient perceived health competence are positively correlated. Moreover, when patient s perceives good compassionate care and adequate amount of social support then their health competence also increases.

Conclusion

In this study, it is concluded that the impact of perceived compassionate care and social support on patient perceived health competence was significant. Correlation analysis showed significant relationship between compassionate care satisfaction, perceived social support and perceived health competence. Moderation analysis showed significant interaction effect of social support in relationship between perceived compassionate care satisfaction and perceived health competence. It depicts that when doctors show compassion to their patients and they feel adequate social support then their health competence also increases. Which validate that psychological principles are implementing by doctors in healthcare practice.

Limitations and future Recommendations: Only graduated patients were taken in the study, public with lower level of education left unexplored. There is limited indigenous literature available on doctor patient relations in reference to medical psychology. Gender differences were not explored in a study that is big limitation because both genders may have different personality dynamics, which may influence thought process. A very good experimental study can be done to assess the doctor-patient relationship by using different strategies on doctors and patients under their treatment in future. It is recommended that a longitudinal study can be done by on follow-up patients to assess factors of doctor-patient relationship and fluctuations in health outcome in relation with these factors. To investigate the cultural diversity related to patient's relations with doctors will be studied through cross cultural research design.

Implications: This study can help doctors to realize that they should be more compassionate about treating their patients as it would increase their health competence and health outcome. Moreover, this research is a best indicator for hospitals to conduct compassion care training sessions for doctors to improve overall healthcare. Furthermore, this study highlights the importance of doctor-patient relationship that hoe good relationship of doctor and patient can predict health competence. Social support was shown as strong predictor of patient's beliefs on their health so this study will become the bridge between doctors, patients and their social support agents in order to support patients to manage their chronic illnesses with positive mindset.

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