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Pain Severity, Illness Appraisal and Pain Acceptance in Patients with Chronic Pain Conditions

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Abstract

The present study used a correlational research design to look into the association across pain severity (PS), illness appraisal (IA) and pain acceptance (PA) among individuals struggling with chronic pain. A purposive sample of 120 chronic pain patients from the Outpatient Departments of both private and government tertiary care hospitals of Lahore was obtained. The participants were asked to fill out a questionnaire booklet including a demographic questionnaire, West Haven Yale Multidimensional Pain Inventory, Revised Illness Perception Questionnaire, and Chronic Pain Acceptance Questionnaire. The findings revealed significant associations between pain severity, its subscales and pain acceptance. Timeline, consequences and emotional representations and pain acceptance; treatment control and illness coherence and pain acceptance showed negative correlation. Emotional representation predicted PA and pain willingness; Consequences, Timeline cyclic, affective distress and interference predicted both PA and Activity engagement; Treatment control and distracting responses were better predictors of pain willingness and negative responses was a better predictor for activity engagement. Independent sample *t*-test indicated that women tend to keep themselves busy with household chores whereas men tend to experience pain with more negative consequences. It was concluded that those who appraised their illness positively showed more acceptance towards their diagnosis and displaying better life regulation. Overall, it was concluded that pain acceptance plays a significant role in the lives of individuals with chronic pain. Hence, the results can be used to enhance empathy among clinical psychologists.

Keywords: Chronic Pain Conditions, Illness Appraisal, Pain Acceptance, Pain Severity

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Introduction

Chronic pain is a recurring and persisting pain for an extended period of time for either 6 or more than 6 months, following the first pain episode (Treede et al., 2015). It is one of the most prevalent debilitating factors which affect almost 20% of the population around the globe (Goldberg & McGee, 2011; Gureje et al., 2007), and is having a lasting impact on their lives. Apart from classifying pain on the basis of duration, area which it has affected, and its consequences (Croft et al., 2010), it is also important to classify pain on the basis of its severity, because functionality of the individual depends on it. However, there exists varied pain tolerance and threshold; due to which individual experiences of experiencing pain varies (Henderson et al., 2013; Kaye & Urman, 2011). One such definition of pain severity suggests that; "*it is a pain which is severe enough to limit your day to day activities or change your daily*

routine for more than a day" (Croft et al., 2010). There are many different neurogenic conditions in which pain is experienced. But the severity, intensity and duration of each pain disorder vary but the most Common type of pain conditions that affect almost everyone is the musculoskeletal pain which results from damage to muscles, tendons, ligaments and soft tissues (Fernández-de-las-Peñas, 2014; Gatchel & Schultz, 2014). Another such disease in which a person faces debilitating pain is arthritis, which is primarily of two types, namely; Rheumatoid Arthritis (RA) and Osteoarthritis (OA). RA can occur at any age (Brannon & Feist, 2010), whereas, OA is so common that it affects almost 50% of the adult population (Brannon et al., 2021). Low back pain (LBP) is another chronic condition whose prevalence is approximately 20% among western countries such as Canada, Sweden, US, and Finland (Fatoye et al., 2019); whereas, an uncommon pain condition, which causes brutal stabbing and burning sensation down the side of the face that can later change into chronic pain is trigeminal neuralgia (Trigeminal Neuralgia, 2024).

Although the above-mentioned conditions are severe, there are certain individual factors which control how the pain is experienced. One such factor which is often neglected is how an individual appraises his/her pain and attach the meaning to (Unal et al., 2019). Illness appraisal (IA), refers to the personal conceptualizations of the disease, including how its perceived of the disease, as well as individual attitudes and ideas related to the understanding of the illness (O'Donohue & Tolle, 2009). Illness appraisal is explained by two models in which, Kleinman and associates' Explanatory model (1978), suggests that the meaning of illness and health depends largely on the cultural factors in which socio-demographic factors play an important role (Tirodkar et al., 2010). Whereas, Leventhals and associates' Self Regulation Model (1992), focuses on the psychological aspects of illness (Lubkin & Larsen, 2013) model is based on the approaches to problem solving and is divided in three stages, in which an individual faces a problem and perceived it, followed by developing coping strategies for it and eventually appraising the problem and deciding whether to use positive coping strategies or negative (Odgen, 2018). According to the literature (McCracken & Eccleston, 2003; Moore et al., 2015), the stage which causes problem to people is the development of healthy coping strategies. If a person suffering from chronic pain does not develop healthy coping strategy, this would lead them to ineffective use of them. Thus, empirical evidence suggested that in order to tolerate pain better, accepting it proves to be more effective than developing coping strategies for it.

Accepting the pain plays an important role in determining an individual's reaction towards the pain and resultantly engages in treatment process and is said to be associated with minor pain, lesser disability, depression and anxiety symptoms (McCracken & Eccleston, 2003). Individuals with chronic pain difficulties often find it difficult to view pain as long lasting; seek short term treatment with an aim to find cure for their problem (LaChapelle et al., 2008). This eventually leads towards hesitant approach to seek pain treatment which may in fact be more helpful than short term treatments. Therefore, it is imperative for individuals to gain a sense of PA for better treatment outcomes (Andrasik et al., 2015). Accepting pain leads an individual to take charge of their lives in spite of chronic pain symptoms, which allows them to view that pain does not indicate disability and bleak future, thus decreasing stress from their lives regarding the pain. (Collingwood, 2008). Thus, in order to advance the overall well-being of individuals struggling with chronic pain, accepting pain

in the earlier stages become significant. The present study would be helpful, in finding the relationship between the studied variable within the cultural context of Pakistan because in Asian countries, like Pakistan, pain could be experienced, perceived, and interpreted differently due to different cultural and socio-demographic variables. Keeping in view the above factors, it was hypothesized there is a relationship between PA (Pain Severity) and its subscales, IA (Illness Appraisal) and its subscales and PA (Pain Acceptance) along with its subscales; and that pain severity and illness appraisal would likely to predict pain acceptance and its subscales.

Method

Research Design

Correlational research was used to identify any patterns and strength of relationship that exists between the studied variables.

Sampling Strategy

Purposive sampling strategy was be used, in which particular sample was chosen on the basis of inclusion/exclusion criteria.

Participants

A sample size of 120 chronic pain patients (M = 36, F = 84) after being calculated by G-Power analysis, were approached. Participants were selected on the basis of chronic pain condition they were suffering from namely musculoskeletal pain (*n*=30), arthritis (*n*=30), sciatica (*n*=30) and trigeminal neuralgia (*n*=30). The mean age of the participants was 40.57 (*SD*=11.06) with participants selected from Government Hospitals. The hospitals included Jinnah Hospital, Sheikh Khalifa bin Zayed Hospital and Lahore General Hospital. Majority of the participants were married (78.3%), with more female representation (70%) living in nuclear family system (67.5) and were Muslims (97.5%). (Table 1)

Table 1

Demographic Characteristics of the Participants (N=120)

Participant Characteristics	*f*	*%*
Type of treatment for the pain		
Medicine	105	87.5
Herbs	05	4.2
Homeopathic	05	4.2
Other	03	2.5
Effect on daily life of the participant		
Yes	110	91.7
No	10	8.3
Effect on social life of the participant		
Yes	96	80
No	21	20
Psychological distress faced by participant		
Yes	65	54.2
No	55	45.8
Changes in mood due to pain		
Yes	98	81.7
No	22	18.3

Example of changes in mood		
Irritability	44	36.7
Sadness	09	7.5
Ungratefulness	17	14.2
Hopelessness	16	13.3
Sensitivity	13	10.8
Not applicable	21	17.5

Inclusion/Exclusion Criteria

Participants who had been suffering from pain for at least 6 months and were diagnosed with either musculoskeletal pain, arthritis, sciatica, or trigeminal neuralgia were made part of the study. Moreover, only individuals aged above 18 years of age were selected. However, individuals with any serious physiological or psychological mental illness and those who weren't fluent in Urdu Language were excluded from the study.

Measures

Demographic Sheet

The researcher developed the demographic sheet to obtain information related to one's gender, age, educational level, type of problem one's going through, marital status.

West Haven Yale Multidimensional Pain Inventory (WHYMPI)

WHYMPI was developed by Kerns et al. (1985). It consists of 3 domains with a total of 52 items. The fist domain inquiries about a person's severity of the pain, the second domain focuses on the patients range of suffering and the perception of his significant other's reaction towards patient's pain. While the third domain assess on the daily living activities of patients influenced by chronic pain. The Cronbach alpha of the tool ranges from .70-.90. Scoring was done by taking the average of each subscale within each domain. Urdu translated version of the scale was used with Cronbach alpha of .80.

Revised Illness Perception Questionnaire (R-IPQ)

IPQ was developed by Weinman et al. in 1996, is based on Leventhal's Self-regulatory model to provide the quantitative assessment of five components of the illness representations: identity, consequences, timeline, control/cure. Revised version by Moss-Morris et al. (2002) was used in the present study. It measures both negative and positive illness representations. Elevated scores on timeline, consequences, timeline cyclic and emotional representations, represent negative illness perception, whereas high scores on personal control, treatment control and illness represent positive illness perception. Scoring was done on a five-point Likert Scale, ranging from Strongly Disagree to Strongly Agree by summing up total scores. Translated version of the tool was used in the study with the Cronbach alpha of .57 showing moderate reliability. The alpha's for each of the subscales in the present study ranged from 0.79 to 0.89.

Chronic Pain Acceptance Questionnaire (CPAQ)

CPAQ was developed by Vowles et al. (2008). It consists of 20 items that are divided under two subscales namely, Activity Engagement and Pain Willingness. The questionnaire was scored using a 7-point scale ranging from 0 to 6. Elevated scores on the scale indicated elevated level of pain acceptance. The CPAQ showed good internal consistency (.77). The tool was used in Urdu Language.

Procedure

Pilot Study

A pilot study was carried out after the approval of the Departmental Doctoral Program Committee (DDPC) of the University of the Punjab, Lahore. The pilot

study was conducted to determine the response trends in the selected population and any procedural complications that might occur during the data collection. Five participants were selected from Government hospitals. The primary goal of the pilot study was to eliminate the understandings of the Urdu translated items and demographic sheet.

Main Study

Numerous health professionals who deal with patients from chronic pain were contacted from the government hospitals of Lahore and permission for collecting data was taken from them. The public sector hospitals taken in the study were Jinnah Hospital, Sheikh Khalifa bin Zayed Hospital and Lahore General Hospital. The health professionals were also given the inclusion and exclusion sheet in order for them to refer the patients accordingly after carefully diagnosing them. This step ensured that only those individuals were made part of the study who actually were suffering from either of the 4 chronic pain conditions. Total 120 participants were taken of four different chronic pain conditions. Before taking their information, the participants were briefed about their right to withdraw, confidentiality, voluntary participation etc. The data was collected under constant supervision of researcher to avoid any ambiguity or queries. The data was analyzed by using SPSS.

Statistical Analyses

The data was statistically analyzed using the Statistical Package for Social Sciences (SPSS). A Pearson Product- Moment Correlation was conducted to investigate the relationship of pain acceptance with pain severity and illness appraisal. Moreover, a multiple hierarchical regression analysis was run to investigate the predictors of pain acceptance and its domains namely activity engagement and pain willingness.

Ethical Considerations

The study was approved by the Departmental Doctoral Program Committee of Centre for Clinical Psychology, University of the Punjab, Lahore, Pakistan. Concerned authorities were approached to take their permissions and consent was obtained from the participants before proceeding. Participants were informed about their right to withdraw from the study at any given time and confidentiality of their data was guaranteed. The results were reported without any fabrication of data.

Results

Table 2 and 3 shows the correlation between pain severity, illness appraisal and pain acceptance. The results in table 2 revealed that there was a negative relationship between interference, pain severity, and negative responses with that of activity engagement ($p<.01$). A positive relation was found between activity engagement and subscales of WHMPI including, support, life control, solicitous responses, activities away from home and household chores ($p<.001$). Similarly, the results indicated a positive relationship between life control and pain willingness. Furthermore, responses and pain willingness ($p<.001$) showed significant negative correlation. The hypothesis was further substantiated when interference, pain severity, negative responses and pain acceptance ($p<.01$) were found to have a negative correlation. A significant positive relationship was also found between support, life control, social activities ($p<.01$), and activities away from home and pain acceptance ($p<.05$).

Table 2 further indicated a significant negative relationship between timeline, consequences, emotional representation and activity engagement ($p<.01$). A positively significant relationship ($p<.01$) was also found between the IPQ-R subscales: personal control, treatment control, illness coherence, and activity engagement. A strong negative

relationship was found between emotional representation and pain willingness (p<.01), and a negative association was found between timeline, consequences, emotional representations and pain acceptance (p<.01). Moreover, a significant positive correlation between pain acceptance and treatment control and illness coherence was also found. Another significant relationship was also found between personal control and pain acceptance (p<.01).

Results

Table 2

Pearson product moment correlation between pain severity and pain acceptance

Domain	*Measures*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*	*13*	*14*	*15*	*16*	*17*	*M*	*SD*
	Age	.42**	-.11	-.00	-.01	-.02	.02	-.07	-.01	.05	-.00	-.70	-.16	-.05	.15	.01	.14	1.79	.744
	Dur of ill	-	-.03	-.11	-.00	.02	.15	.11	.03	.02	.22*	-.19*	.06	-.00	.15	-.12	.06	3.80	4.11
Pain Impact	Interference			-.08	.51**	.22**	.23**	.39**	-.06	.00	-.20*	.01	-.12	-.21**	-.51**	-.06	.49**	33.55	8.60
Perceived Support	Support			-	.28**	-.26**	-.26**	-.31**	.64**	.21**	-.06	.03	.25**	.22**	.27**	.01	.25**	10.13	3.66
Pain Impact	Pain severity				-	-.05	.30**	.46**	-.06	.10	-.05	-.11	-.28**	-.22**	-.38**	.01	.33**	9.95	2.49
Pain Impact	Life control					-	.03	-.37**	.12	.02	.09	.08	.13	.23**	.31**	.23**	.41**	5.32	2.10
Perceived Support	Affec Distr						-	.28**	-.06	.01	-.08	.07	-.03	.05	-.08	-.06	-.11	8.69	1.67
	Negative Res							-	-.32**	-.06	-.02	-.23**	-.31**	-.42**	-.41**	-.06	.40**	7.71	2.54
	Solicit Res								-	.46**	-.00	.18*	.45**	.49**	.22**	-.14	.12	19.49	6.75
	Distract Res									-	.10	.16*	.35**	.36**	.12	-.28**	-.05	8.28	3.67
Activity Level	House chores										-	.02	.18*	.03`	.17*	-.11	.09	14.62	5.54
Activity Level	Out Work											-	.61**	.46**	.14	-.08	.07	8.03	5.33
Activity Level	Act away												-	.66**	.22**	-.04	.16*	7.34	5.24
Activity Level	Social Act													-	.33*	-.06	.26**	9.37	4.20
	Activity Eng														-	-.11	.86**	27.10	12.83
	Pain willing															-	.46**	22.19	8.15
	Pain Acceptance																-	49.30	14.37

***p<.01 (one tailed) *p<.05 (one tailed)*

Table 3

Pearson Product Moment Correlation between Illness Appraisal and Pain Acceptance (N=120)

Measures	***Subscales***	***2***	***3***	***4***	***5***	***6***	***7***	***8***	***9***	***10***	***M***	***SD***
Negative IP	Timeline	.37**	- .20*	- .40**	- .43**	.30**	.42**	-.20*	-.11	- .25**	17.65	5.26
Negative IP	Consequences	-	- .21*	- .30**	- .54**	.12	.34**	- .59**	-.12	- .60**	19.51	4.35
Positive IP	Personal Contr		-	.58**	.43**	-.11	- .29**	.28**	-.09	.19*	19.24	3.86
Positive IP	Treatment Con			-	.54**	- .21**	- .27**	.40**	-.14	.27**	17.64	3.56
Positive IP	Illness Cohere				-	-.20*	- .46**	.37**	.11	.40**	16.52	4.69
Negative IP	Timeline Cycli					-	.05	.06	.06	.09	11.33	3.99
Negative IP	Emotional Rep						-	- .37**	- .36**	- .52**	19.98	5.26
Pain Accepta	Activity engag							-	-.11	.82**	27.10	12.83
Pain Accepta	Pain willing								-	.46**	22.19	8.15
PA Total										-	49.30	14.37

***p<.01, *p<.05*

Table 4

Hierarchical Linear Regression predicting Pain Willingness, Activity Engagement and Pain Acceptance among Individuals with Chronic Pain (N=120)

	Pain Acceptance					
	Pain Willingness		Activity Engagement		Pain Acceptance	
Variables	**ΔR^2**	**β**	**ΔR^2**	**B**	**ΔR^2**	**β**
Model 1	.02		.48		.02	
Age		.08		.11		.14
D. of illness		-.17		.13		.01
Model 2	.36		.56		.60	
Interference		-.09		-1.9*		-.22*
Support		-.11		-.19		.10
Pain severity		.20		.11		.01
Life control		.15		.06		.14
Affective Distress		-.00		.16		.15
Neg Resp		.14		.07		.01
Solicit Res		.10		-.17		.09
Distract Res		-.35**		.09		-.10
Out Work		-.07		-.37		-.37
House Chores		-.07		-.23		-.24
Act away		.34		-.54		-.28
Social Act		-.03		-.25		.24
Identity		.00		.16*		.15*
Timeline		.00		.13		.12
Consequences		-.17		-.34**		-.40***
Personal Contr		.01		-.01		-.00
Treatment Con		-.34***		.28		.06
Illness Cohere		.12		-.02		.04
Timeline Cycli		.11		.10		.15*
Emotional Rep		-.35***		-.15		-.34***
Total R^2	.39		.61		.63	

Note. $^{*}p<.05$; $^{**}p<.01$; $^{***}p<.001$; β = Standardized Co efficient; ΔR^2= R Square change; R^2= R Squ D. of Illness = Duration of illness; neg resp= negative responses; out work = outdoor work, act away= activities away from home

To investigate the predictors of pain acceptance and its domains namely activity engagement and pain willingness, multiple hierarchical regression analysis was run in which age and duration of illness were added in block one as control variables. Pain Severity and Illness Perception along with their subscales were entered as predictors in block 2. Final model was found significant with $F(21, 95) = 6.22, p<.0005, R^2$ .51 (Table 4).

Among predictors; interference and consequences came out to be significant negative predictors; while, identity came out to be positive predictor of pain acceptance. This implied that individuals who feel that their pain is out of control and plays a significant factor to interfere along with associate negative consequences with the painful condition results in lesser acceptance of pain. While, individuals who feel that painful condition through which the person is

going through adapts better towards the chronic pain and accepts to love with is.

For Activity Engagement, consequences and interference were significant predictors with negative regression weight; whereas, identity significantly predicted AE with positive regression weight. This implied that individuals who feel that the pain they are experiencing has negative outcome, associate negative feelings with it and consider it to be interfering tend to engage themselves less in daily life activities. Whereas, those individuals, who feel that they would have to learn to live pain and try to find ways to overcome tend to gauge themselves in more activities.

The results also revealed that emotional representation, treatment control, and distracting responses are significantly negative predictors of pain willingness. This indicated that individuals who are highly emotional regarding their medical condition causing pain condition and do not distract themselves by performing daily life activities are less willing to accept pain.

Discussion

The study intended to determine the association across Pain Severity (PS), Illness Appraisal (IA), and Pain Acceptance (PA) in patients suffering chronic pain conditions. The primary focus was to understand how pain severity and illness appraisal of the patients towards the pain severity predicted the acceptance of pain.

The results indicated a significant relationship between the domains of PS and IA with PA total scores along with its domains. A negative significant correlation was found between interference, pain severity, negative responses, distracting responses, household chores (subscales of pain severity) and activity engagement related pain acceptance. These are the negative domains of pain severity. The results implied that people who feel that the pain they are experiencing is interfering in their daily lives, attach negative feelings with painful condition and consider it extremely damaging for them, often refrain themselves from engaging in activities which may require effort. The above findings are well coordinated by previous studies (Kratz et al., 2016; McCracken & Samuel, 2007) who found the relationship between activity engagement with pain interference and sociability with greater quality of life. The findings were further empirically validated by stating that those who are less accepting towards their pain are likely to complain severe pain, have negative cognitions of pain and respond with negative responses regarding pain indicated lesser pain acceptance and engage less in their daily living activities. The findings can also be seen in religious context. Being a Muslim country, people in Pakistan often associated patience with tranquility and better life. It is often instilled in them that we should accept the hardships such as experiencing pain as a blessing in disguise.

A significant positive correlation between subscales of pain severity including support, life control, activities away from home and social activities and activities engagement was found. It referred that people who have support from their significant others or from people they feel close to, and feel that they have control over their lives often engage in activities resulting in acceptance of pain. The findings can be well supported by the previous research (Kratz et al., 2014) that also found similar results indicating that activity engagement predicted lesser pain interference and more social role satisfaction with greater quality of life (Chapman et al., 2019). Pakistan is a collectivistic country and most families often follow a joint family system with extended family members living under one roof. Though living in extended

families bring about a lot of troubles, but for people suffering from chronic pain this serves as a blessing. Emotional as well as the physical support help them in overcoming their painful condition and engage in daily activities.

Furthermore, a negative relationship of distracting responses, and positive relationship of life control (determinants of pain severity) was found with pain willingness. This inferred that people use distracting techniques to avoid accepting the chronic pain condition, thus not indulging in any such activities which could later cause their pain or increase the severity of the pain. This further suggested that people who presume that they have better control over their lives and can do things to make it better, are not hesitant at performing activities that may lead to pain causation. Empirical evidences (Moore et al., 2015) suggested the same indicating that distraction act as a coping strategy for individuals with acute pain and not with chronic pain; whereas, there has been indications of relationships between perceiving that one has control over their lives and pain willingness (Titus & Biggs, 2016).

A significant negative relationship between timeline, consequences, emotional representations and activity engagement indicated that people who appraise their illness to be never ending and associate greater negative consequences along with negative emotions with it are more likely to refrain themselves from performing or engaging in activities. McManimen et al. (2019) also suggested the same that in chronic diseases, not being able to get themselves treated, individuals may perceive the chronicity of their illness as part of their lives, perceiving their conditions with few consequences which eventually lead to acceptance. Whereas, positive correlation between personal control, treatment control, illness coherence and activity engagement were validated by the studies (Arat et al., 2018; Järemo et al., 2017; Vowels et al., 2014) indicating that having control over personal life and treatment along with having a sense of illness they are suffering help them to indulge in activities.

Multiple Hierarchical Regression Analysis revealed that consequences, and interference negatively; while identity positively predicted activity engagement. This indicated that attaching negative consequences and responses hinders the activity of the individual suffering from chronic pain, whereas, having a control over the treatment and considering pain to be cyclic resultantly increased the activity of the sufferers. The results are in accordance with studies, which implicated that various psychological factors such as false beliefs regarding pain interferes with physical activity (Barriers to Physical Activity, 2022; Boutevillain et al., 2017; Chiros & O'Brien, 2011). Furthermore, the study (Chiros & O Brien, 2011) has also suggested that perceiving control over pain is a predictor of performing activity. Additionally, emotional representation, treatment control, and distracting responses negatively predicted pain willingness. Researchers have suggested that being heightened emotions regarding pain, perceiving lesser control over the pain, and distracting oneself from it resultantly effect one's ability to willingly accept the accept the pain and live with it (Lumley et al., 2011; Moore et al., 2015).

Lastly, identity positively, while consequences and interference negatively predicted pain acceptance. Meta analyses (Jackson et al., 2014) argued that perceiving the pain to be threatening i.e., having less control over it results in negative outcomes. A negative prediction could be validated by previous studies (Chiros & O'Brien, 2011; Fish et al., 2013) who concluded that interference of pain and being highly emotional about it clouds our mind and

impacts on a person's competency to accept the pain. Other substantial findings of the research done by Leventhal et al. (2001) support the present findings. On the basis of self regulatory model, patients with increase in emotional representations are more vulnerable to use avoidant coping mechanism, hence leading to poorer outcome, such as lesser pain acceptance.

Limitations and Suggestions

Lack of education of the sample taken from Government hospitals took them more time to understand the rationale of the study and their role in it. All the participants were taken from Government hospitals, thus most belonged to the lower socio-economic status which could have affected the results.

Moreover, a broad age range of participants were made part of the study; therefore, making age bands could have given additional findings. More representative sample of each chronic condition would further validate the reliability of the results.

In order to enhance the pain acceptance, it is imperative for the physicians to develop liaisons with Clinical Psychologists whilst dealing with the patients with chronic pain conditions.

Conclusion

Overall, it could be concluded that pain severity and appraisal of the illness can have an impact on pain acceptance. Moreover, various cultural factors should be considered in mind while trying to develop acceptance of the patients with chronic pain. A qualitative research with in depth understanding of chronic pain and its symptoms both psychologically and physically can be done, to provide evidences for idiosyncratic beliefs related to pain. Culture specific beliefs related to the painful condition can be listed out and mental health professionals can work with health care professionals in order to provide mental health facilities along with medical professional managing their painful conditions. General guidelines and awareness campaigns can be done to help the patients with chronic pain shed their negative beliefs regarding illness while teaching them to develop more positive adaptive beliefs.

Based on the findings and the importance of pain acceptance, mental health professionals can get themselves trained in Acceptance and Commitment therapy and the efficacy of the therapy can be seen among the groups in order to standardize the therapy on Pakistani population.

Contribution of Authors

Khola Tahir: Conceptualization, Investigation, Methodology, Data Curation, Formal Analysis, Writing – Original Draft

Humaira Naz: Methodology, Writing - Reviewing & Editing, Supervision

Iman Amir Sheikh: Methodology, Formal Analysis, Writing - Reviewing & Editing

Conflict of Interest

There is no conflict of interest declared by the authors.

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Data Availability Statement

The datasets of the current study are not available publicly due to ethical reasons but are available from the corresponding author [I.A.S.] upon the reasonable request.

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