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Metacognitive Beliefs and Unhelpful Metacognitive Coping Strategies of Caregivers with Patients of Schizophrenia: A systematic Review

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Abstract

Exploring caregivers' metacognitive beliefs and coping strategies provides valuable insights into their subjective experiences and the complex dynamics involved in caring for individuals with Schizophrenia. Families assume most of the responsibility of managing this condition and caregivers are involved in taking care of the patient most of the time. The purpose of this work was to provide a better insight into the metacognitive attitudes and coping mechanisms of carers of schizophrenia patients considering the difficult tasks and stressful responsibility these people have. For the current systematic review, the authors have searched relevant literatures from September 2022 to the present (2023) using, Google Scholar, PubMed, Springer Wiley’s Library, and SCOPUS. Among the total of 89 records identified, 16 full-text articles were included in the analysis and synthesized based on the study’s objective and limitations, published between 2013 and 2023. It can therefore be concluded that the study established the extent to which caregiving affected the metacognitive beliefs and coping strategies of individuals. The caregivers often deal with traumatic events, hopelessness in life and health, limited personal and social contacts, chronic vulnerability, family disruption, conflict, difficulties in communication, prejudice, and concerns of genetic predispositions. These challenges depict the complexity of caring careers and the impact on the caregivers’ psychological and emotional health. Thus, caregivers use different strategies to deal with the challenges arising from their responsibilities. Hence, the strategies to follow include embracing togetherness with the family, expressing respect to family members, praising the family members, being sensitive, learn new things, gaining self-confidence, enlarging on self-fulfillment, and valuing the family. These are some of the positive coping mechanisms that are beneficial to caregivers since they are able to support others while at the same time uplifting themselves given the difficulties that they encounter. All in all, this research emphasizes the diverse problems of family members of the patient with schizophrenia throughout the stormy process of caregiving. Thus, it provides more balanced view of the continuous cycle in which positive coping behaviors balance out the negative features of metacognition and help caregiver tend to their loved ones alongside preserving one’s well-being.

Keywords: Schizophrenia, Metacognition, Positive Coping Strategies, Caregiver Burden, Systematic Review

Prisma/Prospero: PRISMA (Principles of Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guidelines were followed.

Background

Schizophrenia can be defined as a group of disorders that is difficult to treat and influences the lives of millions of people throughout the world [1]. It means that caregivers experience high responsibilities as they are in charge of the overall support, symptom management, and dealing with the illness’ related issues in individuals with schizophrenia [2]. Stress and coping patterns, thus, have perhaps one of the most important roles to play in guardianship, especially to relatives diagnosed with schizophrenia [3]. Therefore, the objective of the present article is to review caregivers' metacognitive beliefs and whether they interact with unhelpful metacognitive coping styles given schizophrenia. Metacognition is understood as the awareness of one's own thinking processes, attitudes, and strategies [4]. It is central in the manner by which the caregivers observe and handle problems they face in the process of caregiving. It was also understood that the responsibility of caring for the clients diagnosed with schizophrenia could be emotionally and psychologically draining [5]. Caring for a person with BPSD is attempting for the caregivers since they may develop distress, anxiety, and helplessness as a result of the challenging nature of the illness [6]. Cognitive imperatives of such beliefs and its effect on caregiver distress is important to understand as its influences the quality of care giving and the resultant effect on both the care givers and patients [7]. Earlier studies have shown that caregiving entails high levels of strain and depression indicating that caregivers' mental health is crucial for the effective handling of schizophrenia [8]. Caregivers with maladaptive MBs which include excessive worrying, rumination and negative thoughts may easily get distressed and develop burn out [9]. Such beliefs can help magnify feelings of hopelessness and increase the level of caregiver burden with a consequent decline in the emotional health status of the individuals [10]. Furthermore it is observed that metacognitive coping strategies that are employed by the caregivers are even more important regarding stress and other associated facets regarding caregiving [11]. Adverse metacognition coping modes such as suppression, avoidance as well as rumination, maintains the distress going and interferes with the caregiving responsibilities [12]. The maladaptive metacognition coping styles on the other hand would reduce resilience and the quality of caregiving while on the other hand the adaptive other metacognition coping styles namely cognitive reappraisal and the problem solving would enhance resilience. outcomes. Although some explored the role of metacognitive beliefs and coping in the caregivers' distress, there is a need to address a gap where an extensive and systematic analysis of the relationship between the aforementioned variables would be provided when considering schizophrenia caregiving [13]. This research gap is filling this study by providing a systematic search of the most current literature currently available on metacognitive beliefs and coping mechanisms of caregivers of persons with schizophrenia [14]. In this paper, based on the literature study of empirical research, we aim to explore crucial metacognitive beliefs that are quite common in the caregivers and their link with the caregiving-related distress [15]. Furthermore, this work will generate knowledge regarding the effects of unhelpful metacognitive coping strategies on caregivers' quality of life and on the kind of care they offer to their family members [16]. Thus, by identifying these links, one can get a better understanding of the psychological processes involved in the caregiving trajectory and identify the points of intervention that may help to improve the caregivers' quality of life [17]. In addition, this study will look into resilience, which includes the possible buffering factors and healthy coping strategies that caregivers utilize in dealing with the foregoing stressors in schizophrenia. Thus, these positive aspects can be highlighted and strengthened so that interventions can be made to improve the level of care giving resilience as well as booster the caregivers' well-being [18]. Thus, the findings of this well-coordinated research endeavor are likely to be of profound relevance to mental health professionals, carers, and persons who live with schizophrenia [19]. These will inform the design of specific interventions to address distress of caregivers and enhance other aspects of the caregivers' experiences [20]. In this way an increased knowledge about the interaction between metacognitive beliefs and coping can help to establish circumstances that enable carers to support the patients adequately, while at the same time being able to look after their own needs. The purpose of this research is expanding the knowledge on the caregiving process for people with schizophrenia and their caregivers and raising awareness of the importance of a kind and thorough approach to mental health [21].

Method

Study design

Specifically, in the current study, the caregiver in the early psychosis was to assess the participants' metacognitive beliefs and adaptive coping strategies. The systematic reviews are deemed imperative in synthesizing research findings effectively and accurately; meta-analyses too are vital in accomplishing this task. The results of the present study may contribute to the systematic database available to patients and caregivers and to the assessment by policymakers of the advantages and disadvantages of interventions that may be relevant in the treatment of cancer-related fatigue. The objective of this work was to explore the accumulated data that is relevant to the coping strategies that are dictated by the Self-Regulatory Executive Functioning Model and the relations between these strategies and psychotic episodes. The study questions were theoretical in nature and derived from the S-REF model's specific premises.

Information sources and searches

About the electronic search engines, the following were used which included: Pubmed, SCOPUS, Psych INFO, Science Direct, Full Free PDF and Google Scholar. Randomized controlled trials and cohort studies that have been published and having a high impact factor were only considered with no restrictions to the type of study methodology. Keywords used in the database mentioned above using a data base search engine with an AND operator consisting of "metacognition, metacognitive beliefs, metacognitive beliefs and psychosis, metacognitive coping strategies and caregivers, metacognitive beliefs psychosis coping strategies and caregivers".

Eligibility criteria

The theory-driven study question that was put forth to be measured was the following: (a) Are caregivers' experiences with psychosis related to an increase in self-focused attention? (2) Are caregivers' experiences with psychosis linked to unfavorable persistent thinking (anxiety and rumination)? (3) Are caregivers' experiences with psychosis linked to negative thought-control techniques? Articles meeting at least two of the selection criteria or deemed worthy of further investigation were considered for inclusion. Exclusion criteria consisted of: (a) conference abstracts, case reports, and editorial reports, (b) studies focusing on populations without a primary schizophrenia caregivers, and (c) research only tangentially related as determined by the dissertation committees. Only full-text articles written in English were incorporated. Additionally, the first author will do the screening in three steps (by title, abstract, and complete text, respectively).

Data Collection

The data collection process was structured and presented in tabular format. This table encompassed details such as author names, publication dates, sample sizes, and pertinent sample demographics (e.g., provider occupation). Additionally, it outlined the study design, including measures of metacognitive beliefs, and encapsulated key findings, recommendations, and summaries of the included research studies.

Statistical Analysis

The statistical analysis followed the PRISMA (Principles of Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guidelines.

Results

Between September 1, 2022, and March 25, 2023, researchers conducted a literature search (Fig. 1). After removing duplicates, the 89 records from the electronic and other searches were reduced to 56 records. 36 papers that met the title and abstract screening had their complete texts reviewed for eligibility. All 46 publications were then separately evaluated for eligibility by the first and second reviewers. As a result, 16 papers were chosen for critical evaluation for qualitative study.

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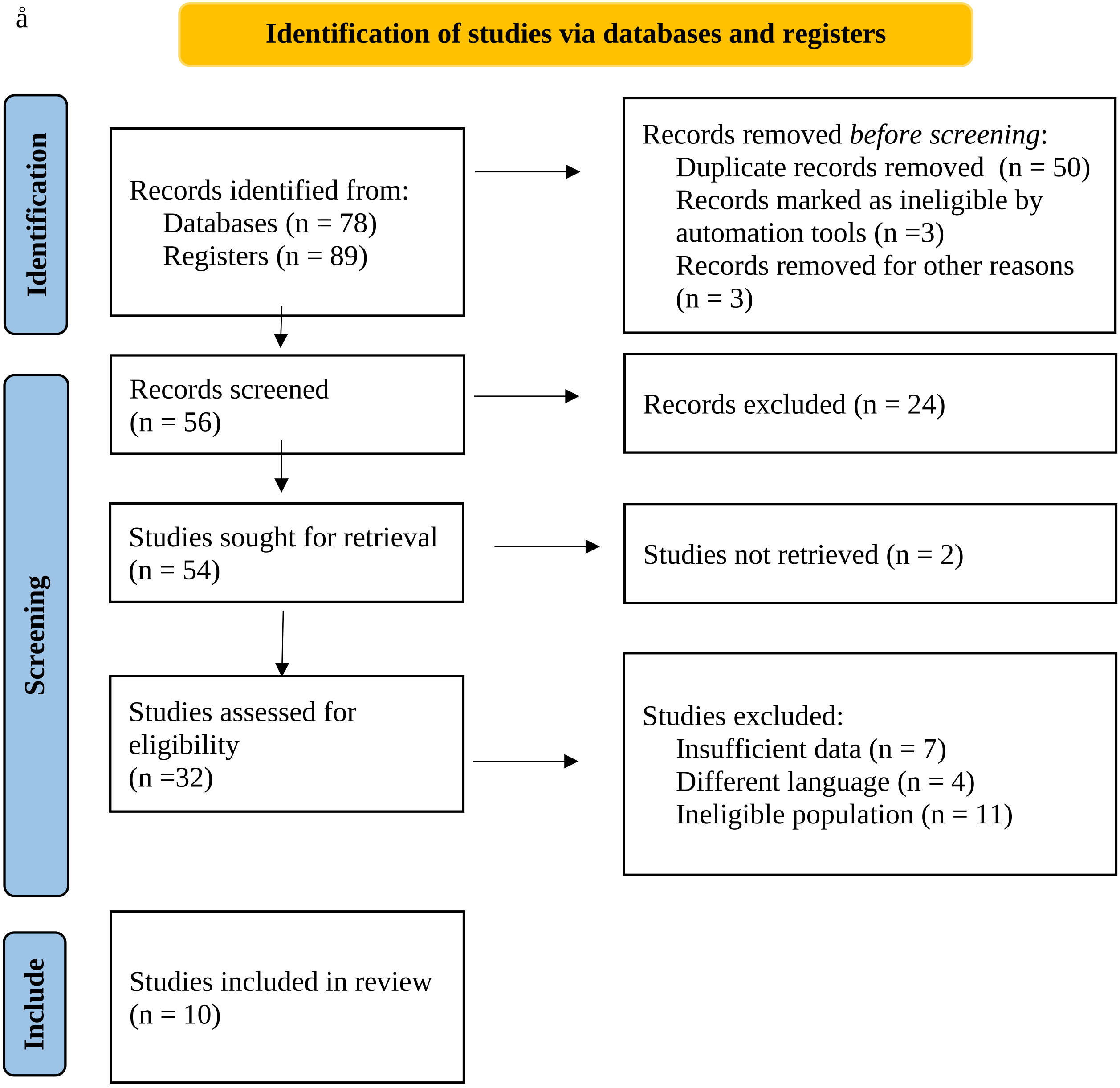

Figure 1 Flow diagram showing the design of the study.

Study	Setting	Care givers	Care recipients	Methods	Purpose of study
Ryan	Canada (One community support group)	5 mothers (Age: 50–62 years Caucasian)	Five grown children (Age range: 22 to 38) Four sons and one daughter illness lasts 6 to 20 years.	Ethnography Tape-recorded anthropological interviews Analysing themes using Spradley's method	To investigate and analyse moms' experiences in raising schizophrenia adult children.
Tuck et al.	USA (Referrals by mental health professionals and the Alli- ance for the Mentally ill)	9 parents (7 females; 2 males) 1 African American and 8 whites	Adolescent adults just men	Phenomenology recordings of interviews Thematic analysis based on the method that four writers devised.	To do research on the phenomenon of raising an adult child who has schizophrenia while maintaining the experience's situated wholeness.
Ip and Mackenzie [59]	Hong Kong, China A single community mental health nursing service in a nearby mental health facility	8 family caregivers Age: 29–70 years; mean = 44.9 years 3 mothers, 2 sisters, 2 wives, And 1 husband	Outpatients Duration of illness: 3–20+ years	Detailed design Semi-structured interviews that were recorded Thematic analysis using Burnard's methodology	To comprehend what it's like to provide care for a family one who is living at home but has a major mental illness

Pejlert	Sweden The transition from a mental institution to a setting more like a home	(8) parents One mother, three couples, and one father	6 patients, range of ages 30-47, average age 41.6	Hermeneutics that are phenomenological Audio recordings of narrative interviews Structural analysis with three stages that two authors produced	To shed light on what it means for parents to provide care for a child who has a serious mental condition and lives in a facility.
Wiens and Daniluk	Canada (A large West Coast city has community mental health centres and support organisations.)	6 fathers: 1 in his 60s, 1 in his 70s, 4 in their late 40s and 50s, and 1 in his Caucasian from the 1970s	6 grown children, ages 18 to 31, 5 sons and 1 daughter, of whom 2 have had an 8-year diagnosis and 4 have one.	Phenomenology Interviews that were recorded and have process notes Utilising Colaizzi's seven-stage process for thematic analysis	We met with fathers whose children had received a diagnosis within the last ten years to have a better understanding of what it's like to raise a young adult with schizophrenia.
Mizuno]	Japan In two prefectures, there are two psychiatric hospitals and two rehabilitation centres.	12 husbands, ages 22 to 77, mean age 50.8	12 wives 47.8 years old, with 47.8 being the mean age. 7 to 41 years have been affected; the average is 18 years.	Design in depth Semi-structured in-person interviews that were recorded content assessment	To describe and comprehend the experiences of men who care for their schizophrenic spouses.
Molefi and Swartz	South Africa One psychiatric hospital in the Western Cape	11 members of the family who provide care 1, 5, 4, and 4 are in their 40s and 50s, respectively. One sister, one father, and nine moms 5 Black and 6 Coloured Africans	Patients	Qualitative exploratory design Digitally recorded face- To-face semi-structured interviews Thematic analysis	To look at the experiences of families in South Africa who have schizophrenic members, how they perceive and comprehend the condition, and how these families and doctors interact

Mizuno et al	Japan Two local family associations	11 family caregivers Age: 37–76 years; mean = 65.1 years All females Mother, sister, wife, and sister-in-law	14 people Age range: 27 to 84; mean: 47.2 years Duration of illness: 10-61 years; mean: 23.6 years	Exploratory descriptive design Digital recordings of focus group discussions Content evaluation	To look into the experiences of families who have schizophrenic members but nonetheless encounter stigma.
Saunders	United States One community resource and service centre in the impoverished Hispanic communities in Texas	10 family caregivers Age: 48–59 years; 54.8 years All females 6 mothers, 3 siblings, and 1 cousin Hispanic (Mexican)	Care recipients	Exploratory descriptive design Digital recordings of focus group discussions Content evaluation Exploratory qualitative design 6 months of audio-recorded interviews with field notes and journaling Content evaluation	To examine at the perspectives of Hispanic caregivers who took daily care of a family member with schizophrenia for six months.

Discussion

Our study sheds light on the myriad challenges faced by caregivers of individuals living with schizophrenia. We employed a systematic review approach to thoroughly examine the existing literature, ensuring that our findings are both comprehensive and reliableas a result of the evaluation of 16 papers that relate to the study of the metacognitive beliefs and coping styles of caregivers, we were able to get some interesting findings on this area of study. Interestingly, the study outlines quite a disturbing fact concerning the experience of the caregivers; that is, caregiving is terrible for those with schizophrenia. Caring for clients put caregivers in distressing situations, loss of something valuable, and disruption of almost all domains of their daily life. Residing with children, the findings highlight the necessity for programs and services that might prevent and decrease the stress of caregiver to enhance the general well-being of the caregivers. It also embraces the influence of social variables, prejudice and prejudice, which enroot on the metacognitive philosophies of thinkers and the modes of dealing with stress by caregivers. Schizophrenia is not only stigmatized to the affected person, but also the whole family fraternity is often surrounded by myths. This stigma results into loneliness, more workload, and few resources that are available for use. Such factors should be targeted by the necessary interventions to improve the social situation and remove prejudice and barriers toward caregivers and other individuals with chronic illnesses. In addition, the study reminds the reader about the enhancement of strength and resources within the caregivers that facilitates change for the better. There are also caregivers' coping strategies involving family solidarity, admiration, and personal changes. These facets should be appreciated and encouraged to improve the general health status of caregivers that will in turn make the process of care giving less burdensome. The other noteworthy concept discussed in the study involves the relation between the Relapse in persons with psychosis and Expressed Emotion (EE). In previous studies, the concern was mainly directed towards the kind of distress that is associated with the EE and relapse and, therefore, keen attention needs to be placed on the needs of the caregivers regardless of the disease's progression. This recognition underscores the need to work with families early, at the stage of the illness where they are first getting involved, as well as in the middle and at the end of the caregiving process. The study provides valuable information regarding the emotional, cognitive, and practical aspects of people who are carers of those with schizophrenia. Thus, the final recommendations emphasize the need to implement and provide consistent individualized support, acknowledge the role of caregivers, and respond to the existing social problems such as prejudice and discriminations. It implies that if the characteristics of caregivers as well as the aspects related to the caregiving process are considered in the framework of providing therapies and treatments, existing or potential sources of distress can be managed effectively to enhance the psychological well-being of both the caregivers and the individuals with schizophrenia. This is an area that necessitates further study in order to increase knowledge and provide more facilities to the caregivers.

Implications

The conclusions of our research provide important implications for upcoming research and practice in the field of caregiving for people with schizophrenia. Here are some of the key **Implications:**

- **Tailored support programs:** Thus, our findings call for the development and implementation of the targeted support programs for the population of the caregivers of the individuals in the state of early psychosis. Future interventions can address psychoeducation and self-care strategies, skills training, and, psychological counselling for the caregivers as they go through the traumatic situations and many uncertainties. These programmes should also help in acknowledging the positive impacts of caregiving besides enhancing the psychological and emotional health of the caregivers.

- **Addressing stigma and discrimination:** Therefore, the emphasis of the study is focused on the facets of stigma and discrimination, which have a harmful effect on the metacognitions of caregivers and their coping styles. There is a need to encourage people's acceptance of mental health issues and increase the community support for carers. The various programs such as awareness creation, educational activities, and changes in policies may offer a model environment to the caregivers and fight the all-knowing attitudes.
- **Early intervention and support:** From the findings, it signifies that if caregiver distress and its potential detrimental effects are to be averted, then intervention and support for caregivers should be initiated at an early stage. Supporting recognized consumers and their families in the early stages of a psychotic disorder; allowing trauma to be managed and caregivers' general well-being to be enhanced.
- **Psychological models and research:** Specifically, the scrutiny of caregivers' distress in early psychosis and the lack of knowledge concerning the psychological models, which can explain it, is emphasised. The future studies should therefore focus on keeping on working on concrete theoretical models that will help in understanding the nature and the difficulties of the caregivers during this period. Better understanding of the possible psychological mechanisms that may explain the levels of caregivers' distress may help in designing better interventions for the caregivers as well as for the care recipients with schizophrenia.

Limitations

- **Publication Bias:** We partially acknowledged that the use of published articles for the current study might be biased because null or negative findings are less likely to be published. This Bias can cause some limitations in the parameter in terms of work coverage and generalization of the results, and some views or results may be missing in the literature.
- **Variability in Study Designs:** Since the included studies may have used varying methods and tools to measure the outcomes, we understand that there may be restricted comparability and some degree of high heterogeneity research. Future directions for studying resistance might include ensuring that measures used to assess it are reliable and valid to ensure that the studies' findings can be compared, therefore making conclusions more solid.
- **Cultural and Contextual Factors:** Given that the studies under consideration might have intentionally targeted certain cultural and contextual aspects, we have to admit the weakness of the literature review when it comes to generalising the results to other populations and settings. As for the future research recommendations they should be as follows: This research should be replicated with more culturally diverse samples to understand the acculturative impact on the caregiving experiences of immigrant caregivers more comprehensively.
- **Lack of Longitudinal Studies:** Thus, although most of the included studies may have used a cross-sectional design, we note the limitation in describing the changes in caregivers' experience over time. Socio-historical investigations would provide more complex enhancement of the nature of the timely caregiver distress and coping patterns regarding more elaborate picture of the effects of caregiving for schizophrenia patients in the long run.

It is recommended to continue the study of these limitations and involve more different practitioners to get a further understanding of the caregivers' experiences and to improve the existing programs and services designed for caregivers of people with schizophrenia.

Declaration

Ethics Approval & Informed Consent

Not applicable

Consent for publication

Not applicable.

Competing interests

There are no financial or non-financial conflicts of interest to report among the authors.

Accessibility of data and materials

The datasets used and analyzed during the current study are available from the corresponding author, for request on reasonable terms.

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Authors' contribution

G. C contributed to the idea for the study, the development of the search strategy, data extraction and analysis, and writing of the manuscript. A. A was the supervisors for G. C who conducted this work as a part of her research higher degree PhD.

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