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2 **A qualitative study to assess the factors leading to medication “non adherence”**
3 **among hypertensive patients**
4
5

6 **Abstract**

7 **Introduction:** Medication adherence is an important path in controlling high blood
8 pressure in and curbing further complications. Uncontrolled blood pressure is mainly
9 caused by medications non-adherence to antihypertensives. Hypertensive person with
10 medication non adherence may leads to many complications like heart failure, ischemic
11 heart disease, chronic kidney disease, recurrent stroke, dementia, aneurysm, blindness
12 and high coronary disease risk. The present study was conducted to gain deeper
13 understanding about the factors leading to medication nonadherence among hypertensive
14 patients among hypertensive patients with medication non adherence attending OPD and
15 admitted in IPD of Railway Hospital Rana Pratap Nagar Udaipur.

16 **Methodology:** Phenomenological Qualitative design was used, 19 participants (11 men
17 and 8 women) were selected using purposive sampling technique as per the pre
18 determined inclusion criteria. Semi structured questionnaires and in depth interview
19 schedule was used for data collection. Voice recording of the conversation was done; the
20 transcript was then thematically analyzed using Open Code 4.02 software. H sir

21 **Result:** Coding and categorization of the transcript was done using the software, based
22 on that, 6 major themes were emerged contributing to medication non adherence. The
23 findings of the study revealed certain themes like individual factors, treatment related
24 factors, health care system related factors, disease related factors, socio cultural factors
25 and Cognitive and Psychological Factors

26 **Conclusion:** Strict medication adherence is priority based intervention in prevention of
27 complications among patients with hypertension. It can help in saving both economical
28 and man-power related resources.

29 **Keywords:** Medication, non adherence, hypertension, participants, factors.
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32

33 **Introduction**

34 Blood pressure is the physical force exerted by the blood as it pushes against the walls of
35 the arteries. It is produced primarily by the contraction of the heart muscle. Blood
36 pressure is marked in two digits alienated by a streak. The top number represents the
37 systolic blood pressure and the bottom number represents the diastolic blood pressure.¹

38

39 Elevated blood pressure is known as hypertension. It is a state in which the blood vessels
40 have steadily elevated pressure.

41

42 The power through which blood pushes against arterial walls or blood vessels when heart
43 pump blood for circulation in whole body is termed as blood pressure. The higher the
44 pressure, the harder the heart has to pump.² The client with hypertension if not taken
45 proper care may leads to many complications like Heart failure, Ischemic heart disease,
46 chronic kidney disease, recurrent stroke, dementia, aneurysm, Blindness and high
47 coronary disease risk.³

48 As per NFHS-5, the prevalence of hypertension in India was 22.6%. It was found to be
49 highest in Sikkim (37.9%), followed by Punjab (34.2%), Goa (33.6%), Kerala (31.1%),
50 Arunachal Pradesh (28.9%), Telangana (28.6%), NCT of Delhi (28.0%), Manipur
51 (28.0%), Andaman & Nicobar Islands (27.3%), Karnataka (27.2%) and Rajasthan
52 (16.5%).⁴ **PAHO (2023)** report shows approximately 4 out of every 5 people with
53 hypertension are not adequately treated, but if countries can level up coverage, 76 million
54 fatality can be prevented between 2023 to 2050. Hypertension affects 1 in 3 adults
55 worldwide.⁵

56 Medication adherence is a multidimensional problem and comprises of three elements:
57 beginning, execution, and persistence. A combination of methods is recommended to
58 measure adherence, with electronic monitoring and drug measurement being the most
59 accurate.⁶

60 Medication Nonadherence is a rising alarm and is connected with unfavorable result.

61 In chronic diseases like cardiovascular diseases (CVDs), regular adherence to medication
62 is quiet difficult.

63

Uncontrolled blood pressure is mainly caused by medications non-adherence to antihypertensives.⁷ **Mathur D. et al (2020)** revealed nonadherence to antihypertensive medications was seen more in males (60.0%) as compared to females (40.0%). The most common reason for nonadherence was found to be forgetfulness (27.6%) followed by poor knowledge about the hypertension and ignorance of long-term treatment (22.9%).⁸ **Hossain A. et al (2024)** found that while comparing to adherence good adherence were connected with improved control. Growing age, rural dwelling was linked with uncontrolled blood pressure. Multiple chronic diseases with multiple medicines added to Comorbidities worsened BP control, and managing multiple medications contribute to reduced adherence and next grade hypertension.⁹ **Ghaderi NZ et al (2024)** carried out a qualitative study on the same topic found two main categories: individual and family factors and organizational support. Personal factors integrated motivational fears, acceptance of disease, fit lifestyle, and disease supervision with follow-up. Family factors included family support, while organizational support included governmental support to provide inexpensive medicines, comprehensive healthcare team support, health insurance access, and media training.¹⁰ **Shrestha S et al (2018)**, in their qualitative study also revealed major barriers including absence of symptoms, reluctance to take medicine, low perceived seriousness of the disease, challenges in behaviour change (diet and exercise), poor family support, and poor communication and mistrust with the service provider. The major reported facilitating factors were fear of consequences of the disease, and family support in controlling diet and adhering to treatment.¹¹

From clinical experience and review in literature, researcher felt the need to assess factors leading to medication among hypertensive patients, because in India majority of the patients are having poor adherence with their medication regime. Subjective reasons behind this non adherence are very less known and unclear.

Objectives of the study:

- ❖ To gain deeper understanding about the factors leading to medication non adherence among hypertensive patients.
- ❖ To identify factors leading to medication non adherence among hypertensive patients

96 **Purpose of the study**

97 The information may be used to improve the patient care approach of the health care
98 providers and to make aware the general public and health care providers about factors
99 leading to medication non adherence among hypertensive patients.

100 **Research methodology**

101 **Research approach:** qualitative, phenomenological descriptive approach

102 **Research design:** qualitative design was used.

103 **Setting:** OPDs and Indoor ward of railway hospital Rana Pratap Nagar Udaipur.

104 **Population:** Hypertensive patients with medication non adherence attending OPD and
105 admitted in IPD of all hospitals of Udaipur Rajasthan.

106 **Sample:** 19 hypertensive patients with medication non adherence attending OPD and
107 admitted in IPD of Railway Hospital Rana Pratap Nagar Udaipur.

108 **Sampling technique:** Non probability purposive sampling technique

109 **Tool:** The tools used in the study consisted of 3 sections.

110 **Section I-** Socio-demographic variables

111 **Section II-** Clinical variables

112 **Section-III-** Hill Bon Medication Adherence Scale (HB-MAS).^{24, 25, 26}

113 **Section IV-** Semi-structured questionnaire related to factors leading to medication non
114 adherence among hypertensive patients.

115 **Data collection procedure**

116 The actual data collection period ranged from 15th Feb 2022 to 15th Jan 2023. Written
117 permission from the authority was taken. 19 participants were selected for the study.
118 Consent form was also distributed to the participants who agreed to participate in the
119 interviews prior to the interviews. All participants were explained thoroughly about the
120 purpose of study. Each participants timing was set for the interview according to their
121 comfortable timings. Demographic questionnaire, clinical variables, Hill Bon Medication
122 Adherence Scale (HB-MAS) and Semi-structured questionnaires and in-depth interviews
123 were used as an instrument for collecting the required data and were devised in order to
124 appropriately address the objectives of this study. In light of this, each participant was
125 encouraged to express their lived feelings and experiences regarding factors leading to
126 medication non adherence. During the interviews, the researcher also paid close attention
127 to social cues from participants, which could be signs of discomfort. The initial interview

128 questions were proceeded by open-ended questions that were unstructured and non-
129 directive, with the sole purpose of providing the participants with the opportunity to share
130 their personal experiences. In doing this, it enabled the researcher to gain more of an
131 inside perspective into the factors leading to medication non adherence.

132 **Findings**

133 **Section 1: Socio demographic characteristics**

134 Majority of the participants 78.95% were in age group of more than 41 years. More than
135 half 57.90% were male and 94.74% belonged to Hindu religion. In terms to their
136 educational status, nearly half of the participants, 47.37% were with secondary level
137 education, nearly 15.79%) had graduation and more. Regarding occupational status
138 nearly half, 9 (47.37%) participants were Govt. employed. Around half 47.37% were
139 moderate worker and 36.84% were sedentary workers. In terms of family income,
140 majority of the participants 68.42% were having income >30001 Rs/- per month while
141 remaining. Around 57.90% participants were residing with Nuclear family. Majority of
142 participants 89.47% were married. More than three fourth participants, 78.95% were
143 living in urban regions. Around half 52.63% were mix-vegetarian.

144 **Section 2: Emerged Themes**

145 Total six major themes have been come out from data analysis. They are:

146 **Theme 1: Individual Factors**

147 Individual factors include the patient's knowledge, awareness, beliefs, memory, cognitive
148 skills, and attitudes toward medication and illness. These factors shape how patients
149 perceive hypertension and determine their motivation and ability to follow treatment
150 recommendations consistently.

151 **Subtheme 1- Forgetfulness / Memory Lapses:** Forgetfulness was often linked to
152 chaotic household environments or cultural events, where health routines were de-
153 prioritized. Around 5 (26.32%) participants frequently forgot to take medication due to
154 daily distractions, travel, events, or changes in routine. This behavioral factor is a
155 common, unintentional cause of non-adherence.

156 “And sometimes I even forget—I go many days without taking it. Four or five days pass,
157 then when I feel a bit of heaviness in the head, I take it.”(Participants-11)

158 Participants also gets distraction from other means and did not take medicines regularly,
159 in the words of a participants

160 “One reason was that I kept forgetting to take the tablets. Also, I wasn’t sure which
161 doctor to consult for treatment, and my friends kept suggesting exercise instead of
162 medication.” (P-5)

163 **Subthemes (2) Limited Health Literacy**

164 : Many patients lacked formal education or did not receive adequate explanation from
165 healthcare providers. As a result, they relied on informal sources, such as friends or
166 community members, for health information. In the words of a participant-
167 “We just act carelessly, thinking nothing will happen. Now it’s up to you people to tell us
168 what harm can happen if we don’t take it.” (P-11)

169 **Subtheme (3) Symptom-driven medication use/hospital visit:**

170 Medication is resumed only when symptoms recur, showing poor understanding of
171 chronic disease management. Some awareness of risks, but equates symptom relief with
172 cure and lacks long-term commitment.

173 “No, I didn’t consult anyone. I just felt like I wasn’t experiencing any symptoms, so I
174 decided to stop taking the medicine to see what happens. And after stopping, I didn’t feel
175 anything, so I stopped completely” (P-12)

176 **Subtheme (4): False belief and misconception**

177 Majority of the participants had baseless beliefs and misunderstandings regarding
178 hypertension and its treatment.

179 “Some people say that if you start regular medicine at a young age, you get dependent.
180 That was in my mind too.” (P-3)

181 Another participant told

182 “I believe these pills make you dependent. They do cause harm somewhere.

183 People get addicted—can’t live without them.” (P-13)

184 **Subtheme (5) Self perception of disease and health**

185 Majority of the participants has defined diseases and health in their own way without any
186 scientific evidence or justification.

187 “I brought a BP machine home and checked my BP several times without taking any
188 medicine—it came normal every time.” (P-14)

189 **Subtheme 6 Occupational Demands**

190 Demanding work schedules, travel, and physical exhaustion made it difficult to maintain
191 routine visits or adhere to medication.

192 “My job often takes me out of town, so I would visit the doctor when I was home.” (P-3)

193 **Theme 2: Treatment Related Factors**

194 Treatment-related factors refer to all aspects of the medication regimen, prescribing
195 practices, side effects, and communication from healthcare providers that directly
196 influence how patients initiate, follow, modify, or discontinue their hypertension
197 treatment. These factors encompass the nature of the treatment itself and how it is
198 perceived, experienced, and implemented by the patient.

199 **Subtheme (1) Complexity of Treatment Regimen:**

200 Several participants struggled with complex regimens, particularly twice-daily dosing,
201 with one preferring a once-daily schedule due to forgetfulness. Misunderstandings about
202 treatment duration and inadequate or changing instructions contributed to non-adherence.
203 “I was told that if it gets worse, I should come back. If I take the medicine for 8 days and
204 don’t feel better, then they would increase the dose and I would have to take a full
205 month’s course. But since I felt better, I didn’t go back to the doctor.” (P-17)

206 **Subtheme (2) Perceived Side Effects**

207 Side effects contributed to non-adherence. These included feelings of weakness,
208 bleeding, heaviness in the head, and anxiety due to the number of pills. One patient
209 specifically noted stopping medication due to feeling weak and unwell
210 “The medicine makes me feel weak, and I don’t feel good taking it, so I don’t take my BP
211 medicine.” (P19)

212 **Subtheme (3) Medication Adherence**

213 Participants often started medication but later stopped due to various reasons: advice
214 from friends, unavailability of medicine, disappearance of symptoms, or lack of
215 perceived benefit. One patient alternated between taking and skipping the medicine,
216 while another felt unsupported by providers due to a lack of follow-up instructions
217 “I started Ayurvedic medicine in between. Sometimes BP would go down, sometimes go
218 up.” (P-16)

219 Some participants stopped medication after a short course due to perceived improvement
220 and reliance on other therapies (e.g., yoga, exercise).

221 “I took it regularly for 8 days and started feeling better. Then I joined Serajim... I didn’t
222 go back to the doctor after that.” (P-17)

223

224 **Theme 3 Health Care System Related Factors**

225 Health system–related factors refer to the systemic gaps and limitations within the
226 healthcare delivery process—such as inadequate communication, lack of structured
227 follow-up, misdiagnosis, and poor counseling—that directly affect a patient’s
228 understanding, engagement, and long-term adherence to hypertension treatment.

229 **Subtheme (1) Poor provider communication**

230 Many patients reported insufficient or unclear explanations about hypertension and the
231 importance of consistent medication. Instructions were limited to basic advice like when
232 to take pills, with no counseling on the risks of non-adherence.

233 “Check-up after one month was advised, but no sustained communication”. (P7)

234 Received general but incomplete guidance

235 “Just that I should keep taking the medicine and not stop it.” (P11)

236 **Subtheme (2) Inadequate Follow-Up and Support**

237 Follow-up systems were weak or nonexistent. Patients often received no instructions
238 regarding return visits, dosage adjustments, or ongoing monitoring. Even when follow-up
239 was mentioned (e.g., “return in 15 days”), it lacked emphasis or clarity, leading to
240 irregular attendance

241 “They gave me 20 days’ medicine. I would go based on my availability. My job often
242 takes me out of town, so I would visit the doctor when I was home.” (P-3)

243 Another participant stated that

244 “They told me that if it gets worse, I should come back. If I take the medicine for 8 days
245 and don’t feel better, then they would increase the dose.” (P-17)

246 **Subtheme 3: Initial Misdiagnosis and Contradictory Advice:**

247 In some cases, participants were misdiagnosed or told their symptoms were due to other
248 conditions (e.g., acidity instead of hypertension).

249 “No, they said it wasn’t too high. It was usually around 150-160. They told me to
250 exercise and keep a normal diet. There was no medication required.” (P-5)

251 **Theme 4 Disease Related Factors**

252 Condition-related factors refer to how the nature, presentation, and patient understanding
253 of hypertension as a disease influence medication adherence and health-seeking
254 behaviors. These factors are shaped by how individuals perceive, experience, or fail to
255 recognize the symptoms or seriousness of the condition.

256 **Subtheme 1 Asymptomatic Nature of Hypertension**

257 Many participants were unaware of their hypertension because they experienced no
258 symptoms. Diagnosis was often incidental during unrelated medical checks.

259 In the words of a participant

260 “I didn’t feel anything related to high BP. I only had dengue symptoms – fever, chills,
261 etc” (P3)

262 Another participant told

263 “I fell ill once, and that’s when the doctor told me. Otherwise, I had no idea on my own
264 that I had sugar or BP. I had no idea at all.” (P-11)

265 **Subtheme 2 : Misconception about disease**

266 Participants often underestimated the seriousness of hypertension, especially when
267 symptoms were absent or BP appeared borderline, leading to poor adherence

268 “When I had high blood pressure, my whole body became numb, I felt extreme fatigue
269 and weakness, and I fainted due to dizziness — I just couldn’t get up. Every time I tried
270 to stand up, I would feel dizzy and fall again. Then I went to the hospital and got
271 checked.” (P-12)

272 Participant also stated

273 “Doctor prescribed the tablets again, and I took them for another 15 days. After that, my
274 symptoms started going away, so I stopped taking the tablets.” (P-12)

275 **Subtheme 3 : Fear of Complications**

276 In contrast to the above, a few participants were clearly aware of the severe health risks
277 posed by uncontrolled hypertension. This fear of complications like stroke, vision loss, or
278 paralysis served as a strong motivator for medication adherence.

279 “If you don’t take the medication, BP can increase, and it can lead to serious issues like a
280 stroke, vision problems, or even paralysis” (P4).

281 **Theme-5 : Socio-Cultural Factors**

282 Socio-cultural and environmental factors encompass the beliefs, traditions, social norms,
283 community influences, family dynamics, economic constraints, and lifestyle elements
284 that shape how individuals perceive and respond to hypertension treatment.

285

286

287

288 **Subtheme 1: Cultural and Social Disruption**

289 Social events (e.g., weddings, funerals), cultural expectations, and spiritual beliefs often
290 disrupted adherence. Participants avoided medication to maintain appearances or due to
291 guidance from spiritual leaders

292 “When it’s crowded or busy, I forget.” “At weddings or events...” (P1)

293 Female participant also responded in same way.

294 ““If someone comes to mourn, I have to cry too... guests would see me lying down and
295 say, 'This is Bua?'” (P10)

296 **Subtheme 2 Family Involvement and Influence**

297 Many lacked family support for medication management—no reminders, assistance, or
298 discussions about risks

299 “My child told me to take the medicine regularly, but I stopped on my own.” (P6)

300 In the words of a participant

301 “There are fights in the house, and that makes me angry.” “I get angry, and then I don’t
302 take the BP medicine.” (P15)

303 **Subtheme 3: Peer and Community Influence**

304 Participants were heavily influenced by friends, neighbors, and community members who
305 advised reducing or stopping medication. Alternatives like exercise, buttermilk, or
306 homeopathy were promoted, often overriding medical advice

307 Discouraged from taking medication

308 “They suggest I do exercises or work out instead of taking pills regularly.” (P5)

309 In the words of a participant

310 “Doctor said it the first time itself—that I had to take it regularly. I started taking it
311 accordingly. Later, on my friends’ advice, I stopped taking the medicine and even
312 stopped going to him.” (P-8)

313 **Subtheme 4 Alcohol Use and Dietary Restrictions**

314 Cultural beliefs around mixing alcohol or non-vegetarian food with medication led to
315 skipped doses, as patients feared harmful interactions.

316 “When there’s meat... or I eat fish, then I don’t take the medicine.” (P-11)

317 **Subtheme 5 Gender Norms and Self-Image**

318 Some male participants projected strength and independence, which discouraged long-
319 term medication use. Admitting dependence on daily medication was shown as a weak
320 point.

321 A participant worded

322 Of course I'm careless—why not? These pills and things—they're all part of a scam.

323 You spend lakhs and crores (laughs with profanity), it's all just a machine to fool people.

324 Wherever I go, people are full of life—they say “You came from Ajmer? You're full of
325 energy!”

326 Everyone else is dull. (P-13)

327 **Theme 6: Cognitive and Psychological Factors**

328 Cognitive factors refer to mental processes such as beliefs, judgments, perceptions,
329 reasoning, and decision-making that shape how individuals interpret their health, assess
330 risks, and choose behaviors. Cognitive factors are often unconscious or habitual and can
331 include biases, misconceptions, and perceived control over health outcomes.

332 **Subtheme 1: Cognitive Bias**

333 This subtheme refers to internal mental shortcuts or beliefs that influence individuals'
334 decisions regarding medication use, often leading to non-adherence

335 “No, I didn't feel anything unusual. At that time, I had gone for a periodical medical
336 examination (PME), and the doctor said that my BP was high.” (P-14)

337 Another participant told

338 “If you don't take the medication, BP can increase, and it can lead to serious issues like a
339 stroke, vision problems, or even paralysis.” (P-4)

340 **Subtheme 2: Low Motivation**

341 There was lack of proactive drive due to feeling well, absence of reminders, or
342 discouragement from others. This subtheme captures both internal (e.g., apathy, lack of
343 symptoms) and external (e.g., social discouragement, system gaps) factors that reduce
344 adherence.

345 But when I saw that the symptoms were gone, I stopped. I didn't continue the medicine
346 regularly.” (P-12)

347 “Yes, and I kept checking my BP, even outside. It stayed normal. I feel my BP rises only
348 when I go to the hospital (laughs).” (P-14)

349

350 **Subtheme 3: Emotional Distress**

351 Emotional trauma (any form) disrupts motivation and regular medication intake.

352 “After my brother passed, I started taking the medicine only once a day.” ((P-10)

353 “Everything at home falls on me—buying, running the house, everything.” “He drinks.

354 My younger son was very small when he got a second wife.” (P9)

355 **Subtheme 4: Carelessness and Self satisfaction**

356 Some participants passive or fatalistic attitudes toward health that reduce medication
357 adherence, including feelings of invulnerability or inevitability of death. In the words of a
358 participant

359 When it seemed under control both at the clinic and pharmacy, I stopped the medicine on
360 my own. After 2–3 months, when I felt my BP was under control, I stopped the
361 medication as per my own decision.” (P3)

362 Another participant stated

363 “Everyone has to die someday, why worry so much?” (P13).

364 **Discussion:-**

365 **Individual factors** influencing medication non-adherence include lack of knowledge,
366 poor awareness, forgetfulness, and personal beliefs. Many participants relied on
367 symptoms to guide treatment, discontinued medication when feeling better or believed
368 lifestyle changes alone could manage blood pressure. Some avoided medication due to
369 fear of dependency and instead used natural or alternative therapies. Misconceptions
370 about health, risk-taking behavior, personal philosophies, and negative treatment
371 experiences also contributed. Additionally, busy schedules, travel, and fatigue hindered
372 consistent medication use and hospital visits.

373 Our findings supported by a qualitative study conducted by **Gupta S. et al (2019)**¹² with
374 the same objectives. They also discovered that non-adherence to antihypertensive
375 medications was associated with awareness of hypertension and its complications.

376 **Khatib R. et al (2014)**¹³ revealed in their systematic review that lack of knowledge was
377 the most common barrier to hypertension awareness while in Meta-Analysis forgetfulness
378 was the chief barrier in medication adherence. **Krishnamoorthy Y et al (2018)**¹⁴ also
379 found forgetfulness, lack of family support, substance abuse as major barriers for
380 medication adherence. **Basu S. et al (2020)**¹⁵ found forgetfulness, carelessness and

381 running out of drug stocks as major factors for medication non-adherence to
382 antihypertensive treatment among patients attending a primary care clinic in Delhi.

383 **Treatment-related factors** comprise complex medicine regimens, puzzling instructions,
384 and adverse effects. Participants struggled with multiple daily doses and preferred
385 simpler schedules. Misunderstandings about treatment duration, inconsistent guidance
386 from different healthcare providers, and unpleasant side effects (e.g., weakness, bleeding,
387 heaviness, anxiety) led to non-adherence. Some stopped medication due to advice from
388 others, unavailability, symptom relief, or a perceived lack of benefit. **Health system–**
389 **related factors** contributing to non-adherence include poor communication, lack of
390 follow-up, misdiagnosis, and inconsistent medical advice. Patients often received
391 minimal explanation about hypertension and the importance of regular medication.
392 Conflicting guidance from different doctors created confusion and mistrust. Follow-up
393 instructions were unclear or missing, leading to irregular visits and medication lapses.
394 Some patients were misdiagnosed or given alternative explanations for their symptoms,
395 while inconsistent blood pressure readings at various facilities caused doubt about their
396 condition and the necessity of treatment.

397 Our two above themes were also in connection with the findings of **Dhar et al (2017)**¹⁶ in
398 which adverse effects of the medication, cost of medication, and patient dissatisfaction
399 with services of the health facility, and poor physician–patient relationships were root
400 cause behind medication non adherence among hypertensive patients

401 **Disease condition-related factors** impacting adherence stem from how patients perceive
402 and understand hypertension. Many were unaware of their condition due to a lack of
403 symptoms and were diagnosed incidentally. The absence of noticeable symptoms or
404 borderline readings led to underestimation of the disease’s seriousness and poor
405 adherence. However, a few participants who understood the risks of uncontrolled
406 hypertension—such as stroke or paralysis—were more motivated to follow treatment
407 properly. **Socio-cultural and environmental factors** affecting adherence include
408 cultural beliefs, social norms, family dynamics, and community influence. Social events,
409 spiritual beliefs, and the desire to maintain appearances led some to skip medication.
410 Preference for traditional remedies over allopathy was common. Lack of family support,
411 conflicts, and external advice from friends or community often disrupted adherence.
412 Cultural taboos (e.g., mixing medication with alcohol or non-veg food) also played a role.

Some men avoided regular medication to project strength and independence, viewing reliance on treatment as a sign of weakness.

Gupta S. et al (2019)¹² found that half of the participant in their study used alternative systems of medicine for treatment of hypertension. **Kumar A et al (2021)**¹⁷ also found factors leading to medication non adherence which were lack of knowledge, poor attitude, lack of family support, forgetfulness, irregular follow up at health care facility, heavy alcohol use and switching between western medicines and alternative treatment.

Cognitive factors involve thought processes like beliefs, judgments, and reasoning that shape how individuals perceive hypertension and decide on treatment. Misconceptions, perceived control, and habitual thinking can lead patients to underestimate the condition or believe they can manage it without medication. **Psychological factors** relate to emotions, motivation, and mental health. Feelings such as fear, anxiety, low motivation, or emotional distress impact a patient's willingness and consistency in following their treatment regimen. While cognitive factors are thought-driven, psychological factors are emotion-driven.

Cinar FI et al (2020)¹⁸ also found that the patients who thought that drugs were overused and had concerns about this were seen to be less adherent with the medication. According to **WHO (2023)**¹⁹, medication adherence is known to be influenced by sociodemographic, health system, therapy-related, condition-related, and patient-related factors. These factors are also approximately correlated with our emerged themes. According to **Wilkinson R. et al (2022)**²⁰, factors behind medication non-adherence among people with hypertension were lack of symptoms from untreated hypertension, fear of medication side effects, interest in traditional herbal medicine, and the importance of family and community support. According to **Zhou X et al (2024)**²¹ lack of medication literacy, reduced sense of benefit from treatment, limited access to healthcare resources, and unintentional nonadherence were barriers of Medication Adherence in Hypertension Patients. **Wejdan Shahin et al (2021)**²² also discovered similar themes in their qualitative study, which were dealing with the illness as per knowledge of the symptoms and causes, self-managing of hypertension, and coping and acquaintance with the illness; theme 2 was beliefs, practices around medication adherence and the barriers and facilitators to taking medications regularly and theme 3 was healthcare encounters represented by participants trust in healthcare providers. **Dalal JJ et al (2021)**²³

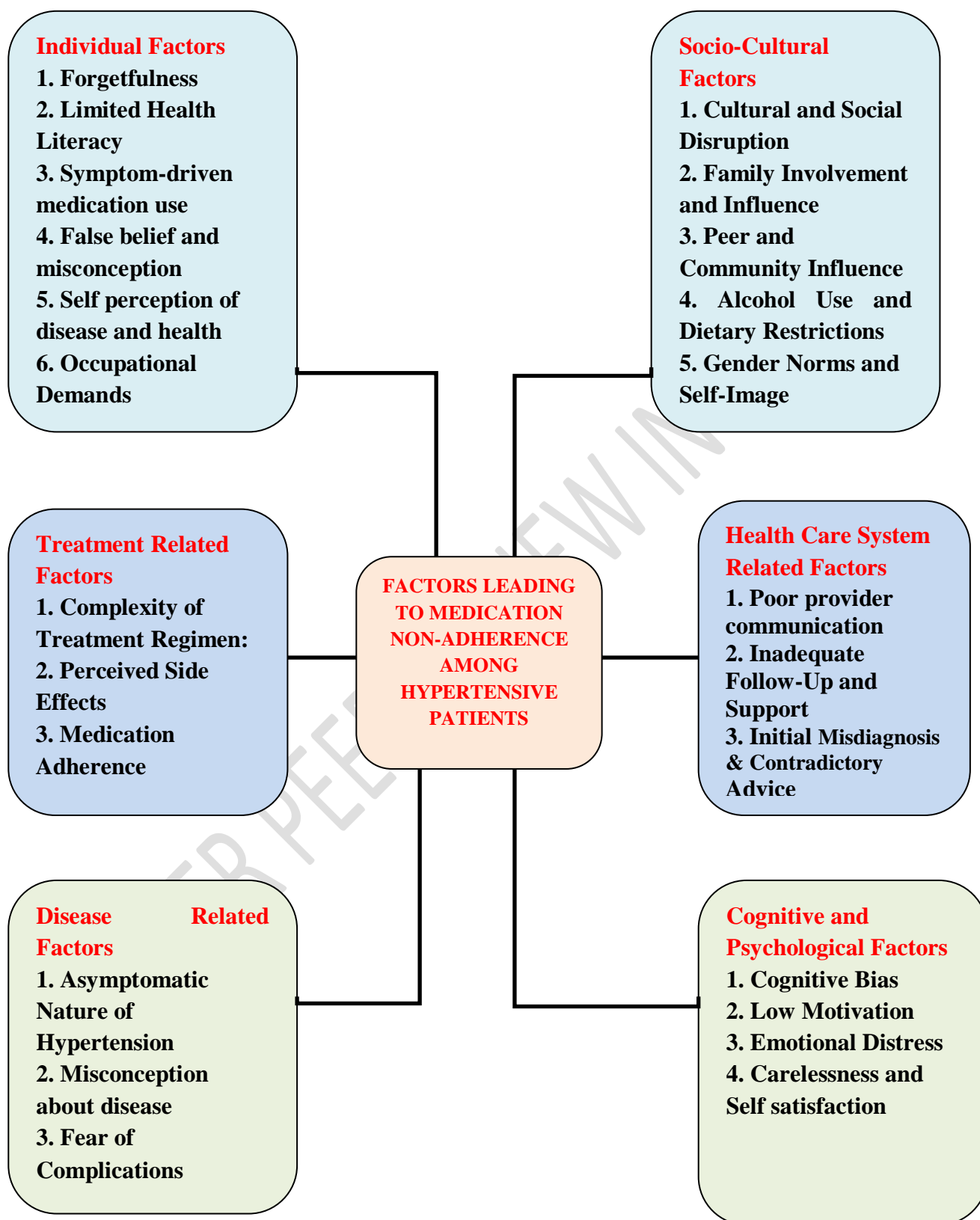
445 discovered that socioeconomic status of lower grade, health awareness, asymptomatic
446 presentation of illness, poor memory, price of medications and hypertension duration
447 decide the medication adherence in India.

448 **Conclusion:-**

449 The findings of the present study provide a powerful picture of the variety of factors
450 causing medication non adherence among hypertensive patients. By using this
451 phenomenological material, we got information on subjective reality of individual and
452 come to understand factors leading to medication non adherence and what sort of
453 supportive framework needed for improved treatment outcome with reducing non
454 adherence in hypertension. Our findings demonstrate that the medication non adherence
455 was a complex phenomenon with multiple causative factors. We found that medication
456 nonadherence was due to variety of reasons likely forgetfulness, lack of knowledge,
457 improper communication, symptoms driven treatment seeking attitude, misperception of
458 disease condition, peer pressure, alternative treatments and unrealistic beliefs about
459 disease control. Researcher felt that there is a need to do further studies related to factors
460 leading to medication non adherence and remedial steps to overcome this problem in
461 management of chronic hypertension and reduction in complications.

462 **Source of funding:** Researchers have self financed the current study.

463 **Conflict of Interest:** No conflict of concern shown by researchers during study period.



Thematic framework of emerged themes

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