

SUPPLEMENTARY FILE

Appendix 1

No.	Databases	Key words	Reasons for exclusion
1.	Google Scholar	"Treatment adherence" OR "compliance" AND "determinants" OR "factors" OR "predictors" OR "influences" AND "hypertension" OR "high blood pressure"	-Measuring single dimension among medication adherence and lifestyle modifications -exploring association of factors with only medication or lifestyle modifications, no common influencing factors -Including other chronic diseases -Conference abstract -duplicates
2.	ScienceDirect	"Treatment adherence" OR "compliance" AND "determinants" OR "factors" OR "predictors" OR "influences" AND "hypertension" OR "high blood pressure" https://www.sciencedirect.com/search?date=2013-2014&q=%E2%80%9Ctreatment%20adherence%E2%80%9D%20OR%20%E2%80%9Ccompliance%E2%80%9D%20AND%20%E2%80%9Cdeterminants%E2%80%9D%20OR%20%E2%80%9Cfactors%E2%80%9D%20OR%20%E2%80%9Cpredictors%E2%80%9D%20AND%20%E2%80%9Chigh%20blood%20pressure%E2%80%9D&articleTypes=FLA&accessTypes=openaccess&langs=en&origin=search&zone=history#submit	
3.	PubMed	(((("treatment adherence and compliance"[MeSH Terms] OR ("treatment"[All Fields] AND "adherence"[All Fields] AND "compliance"[All Fields]) OR "treatment adherence and compliance"[All Fields] OR ("treatment"[All Fields] AND "adherence"[All Fields]) OR "treatment adherence"[All Fields] OR ("compliances"[All Fields] OR "patient compliance"[MeSH Terms] OR ("patient"[All Fields] AND "compliance"[All Fields]) OR "patient compliance"[All Fields] OR "compliance"[All Fields] OR "compliance"[MeSH Terms])) AND ("analysis"[MeSH Subheading] OR "analysis"[All Fields] OR "determination"[All Fields] OR "determinant"[All Fields] OR "determinants"[All Fields] OR "determinate"[All Fields] OR "determined"[All Fields] OR "determinates"[All Fields] OR "determinating"[All Fields] OR "determinations"[All Fields] OR "determine"[All Fields] OR "determined"[All Fields] OR "determines"[All Fields] OR "determining"[All Fields])) OR ("factor"[All Fields] OR "factor s"[All Fields] OR "factors"[All Fields]) OR ("predictor"[All Fields] OR "predictors"[All Fields])) AND ("hypertense"[All Fields] OR "hypertension"[MeSH Terms] OR "hypertension"[All Fields] OR "hypertension s"[All Fields] OR "hypertensions"[All Fields] OR "hypertensive"[All Fields] OR "hypertensive s"[All Fields] OR "hypertensives"[All Fields])) AND (2013/12/1:2024/12/31[pdat])	
4.	WILEY online	"Treatment adherence" OR "compliance" AND "determinants" OR "factors" OR "predictors" OR "influences" AND "hypertension" OR "high blood pressure" "anywhere and "Treatment adherence" OR "compliance" AND "determinants" OR "factors" OR "predictors" OR "influences" AND "hypertension" OR "high blood pressure" anywhere and "Treatment adherence" OR "compliance" AND "determinants" OR "factors" OR "predictors" OR "influences" AND "hypertension" OR "high blood pressure" anywhere	

Appendix 2

No.	Authors	Year	Design	Factors	Outcomes
1.	Al-daken and Eshah	2017	A cross-sectional descriptive comparison design	Higher hypertension knowledge predicted good adherence to HTR ($\beta = 0.143$, $p < 0.02$) and visiting physician regularly ($\beta = 0.410$, $p < 0.001$) to HTR by multiple linear regression analysis	Hypertensive patients had good treatment adherence (82.8%)
2.	Kang et al.	2018	Secondary data analysis from SisterTalk II (a baseline data from Risica and Kang, 2018)	Higher stress also reported lower non-pharmacological adherence ($p = .042$).	Hypertensive patients had adherence to pharmacological treatment (16%). Participants reported adherence to non-pharmacological treatment (41%).
3.	Thuong et al.	2022	A cross-sectional design	Factors related to anti-hypertensive drug adherence included disease duration (OR-0.66 (95%CI 0.50–0.88)), $p = 0.004$) and chronic co-morbidities (OR- 2.21 (95%CI 1.28–3.83)), $p = 0.005$). Factors associated with non-drug adherence included health insurance with follow-up compliance (OR 5.67 (95% CI 2.05–15.67)) $p = 0.001$, co-morbidities with reduced salt intake (OR 0.52 (95% CI 0.37–0.75) $p < 0.001$), and nutritional status with follow-up compliance (OR=1.50, 95%CI: 1.21–1.87, $p < 0.001$)	Hypertensive patients had medication adherence (11.7%), non-smoking (93.5%), limiting alcohol (92.2%), recommended follow-up visits (76.9%), and salt intake reduction (63.1%).
4.	Abu-El-Noor et al.	2020	A cross-sectional descriptive design	Non-adherence rate was correlated significantly and in a negative direction with age ($r = -0.201$, $p = 0.0001$) and duration of diagnosis with hypertension ($r = 0.089$, $p = 0.023$).	Hypertensive patients had adherent to treatment regimen (80.4%).
5.	Soósová et al.	2022	A cross-sectional observational design	Illness perception was associated with treatment adherence, precisely Treatment control to diet adherence ($\beta = 0.196$, $p < 0.01$), Timeline to drug adherence ($\beta = 0.155$, $p < 0.05$), Understanding to diet adherence ($\beta = 0.359$, $p < 0.001$), appointment keeping ($\beta = 0.192$, $p < 0.01$) and medication adherence ($\beta = 0.184$, $p < 0.01$)	Hypertensive patients had adherence to a low-sodium diet (51.5%), agreed appointments with doctors (52.3%), medication adherence (50.9%).
6.	Namwong et al.	2015	A cross-sectional, predictive correlational	Factors related to treatment adherence were physical function (path coefficient = 0.94, $p < .05$), perceived self-efficacy to adherence (path coefficient = 0.69, $p < .01$), social support (path coefficient = 0.14, $p < .01$), provider-patient	NOT reported the treatment adherence.

				communication (path coefficient = 0.34, $p < .01$) had a direct effect on adherence to therapeutic regimens.	
7.	Pinprapapan et al.	2013	A cross-sectional, predictive design	Perceived self-efficacy (path coefficient = 0.54, $p < .01$), social support (path coefficient = 0.13, $p < .01$), and provider-patient communication (path coefficient = 0.42, $p < .01$) had a direct positive effect on their adherence to therapeutic regimens.	NOT reported the treatment adherence.
8.	Adinkrah et al.	2020	A cross-sectional study design	Higher level of adherence to anti-hypertensive medications was associated with (1) less financial strain ($\beta = -0.174$, $p = 0.004$), (2) a higher level of continuity of medical care ($\beta = 0.151$, $p = 0.003$), (3) less negative general beliefs about medications ($\beta = 0.202$, $p = 0.000$), (4) fewer concerns about anti-hypertensive medications ($\beta = -0.143$, $p = 0.007$), and (5) a higher level of hypertension knowledge ($\beta = 0.135$, $p = 0.008$). A higher level of adherence to lifestyle modifications was associated with (1) a higher level of knowledge about hypertension ($\beta = 0.169$, $p = 0.001$), (2) fewer depressive symptoms ($\beta = -0.273$, $p = 0.000$), and (3) better self-perceived health status ($\beta = -0.176$, $p = 0.002$). Knowledge about hypertension was associated with both adherence to medication ($r = 0.12$; $p < 0.05$) and lifestyle modifications ($r = 0.16$; $p < 0.05$).	Hypertensive patients had good adherence to a low-salt diet (23%), a low-fat diet (8%), anti-hypertensive medication (64%).
9.	Paczowska et al.	2021	A prospective, cross-sectional survey	Good knowledge was significantly associated with medication adherence and healthy lifestyle behaviors ($p < 0.05$). Patients with good knowledge significantly ($p < 0.0001$) more frequently took hypotensive drugs as ordered (99.6%) compared to patients with average (53.3%) and poor knowledge (3.9%). Adherence to non-pharmacological treatment: regular physical activity and a weight reduction diet were declared by 96.6% of the patients with good knowledge, only 6.2% of the patients with average knowledge, and none of the patients with poor knowledge ($p < 0.0001$)	NOT reported the treatment adherence.
10.	Chia et al.	2021	A cross-sectional survey	Female participants ($\beta = -0.72$, 95% CI = $-1.30, -0.15$, $p = .014$), older aged ($\beta = -0.05$, 95% CI = $-0.07, -0.03$, $p < .001$), and patients with background of primary education level and below ($\beta = -0.91$, 95% CI = $-1.59, -0.23$, $p = .009$) had lower Hill-bone CHBPTS score, indicating they had	Hypertensive patients had good treatment adherence (52.1%).

				better adherence to BP therapy medication, salt intake and appointment keeping.	
11.	Kara	2022	A cross-sectional design	The self-efficacy scale was positively correlated with the adherence to treatment scale score ($r(214) = 0.496, p=0.01, <0.05$).	NOT reported the treatment adherence.
12.	Pan et al.	2019	A cross-sectional design	Gender ($p=.034$), residence ($p=.029$), and duration of high blood pressure ($p<.001$) were independently associated with anti-hypertensive treatment adherence.	Hypertensive patients had satisfactory adherence behaviors (27.46%).
13.	Shakya et al.	2020	A Descriptive correlational design	A significant positive correlation between illness perception and TA ($\rho = 0.282, p<0.01$), specifically illness perception to medication adherence ($\rho = 0.316, p<0.01$), appointment keeping ($\rho = 0.147, p < 0.05$), specific domain of illness perception (identity) to a reduction in sodium intake ($\rho = -0.194, p<0.01$)	Hypertensive patients had perfect adherence to treatment therapy (14.7%) and optimal adherence (83.8%).
14.	Sadeghi and Ahmadipour	2019	A cross-sectional design	Age ($r= 0.1, p= 0.006$), level of education (adjusted OR=3.51, 95%CI= 2.04 - 6.03, p value= 0.03), and the presence of concurrent medical disease ($p= 0.007$) and psychological disorder (adjusted OR= 1.88, CI= 1.11 - 3.20, $p= 0.02$) significantly predicted treatment adherence. There was a positive statistically significant weak correlation between HTAS ($r = 0.1, P = 0.006$) and age.	Hypertensive patients had good adherence to the treatment (60.3%).
15.	Pan et al.	2021	A hospital-based, cross-sectional survey	Four factors independently associated with anti-hypertensive treatment adherence were gender (Males< females) ($p=0.008$), duration of anti-hypertensive drug used ($p=0.021$), number of anti-hypertensive medications used ($p=0.008$) and social support ($p<0.001$). Social support was strongly and positively associated with the hypertensive TA ($p<0.001$, OR = 0.752, 95% CI: 0.678–0.833). It was found that social support provided to patients from social resources ($r=0.568$) had a more significant impact on TA than that from kinship ($r=0.364$) and nuclear family ($r=0.262$).	Hypertensive patients had optimal adherence behaviors (31.1%).
16.	Madu et al.	2019	Secondary data analysis of his study, a cross-sectional, correlation design	Years with the same provider were related to adherence with a correlation of $r_s=0.16$ ($p=0.048$), and work status was related to adherence with a difference in adherence scores between retired and unemployed subjects ($KS=38.6, p=0.013$) with Bonferroni adjustment; means=3.7 and 3.3, respectively).	NOT reported the treatment adherence.

17.	Uchmanowicz et al.	2018	A cross-sectional design	Treatment adherence was significantly associated with age, each subsequent year of life raises the total score by an average of 0.2 points ($R^2 = 0.2$, $p = 0.01$); male gender, increasing it by an average of 1.34 points as compared to females ($R^2 = 1.34$, $p = 0.04$); education, a secondary, higher, or higher professional education lowers it by an average of 1.75 points compared to primary education or no education ($R^2 = 1.75$, p value = 0.02); living with the family, having familial support lowers the total score by an average of 1.91 points compared to living alone or in an organized institution ($R^2 = 1.91$, $p = 0.02$).	NOT reported the treatment adherence.
18.	Mohamed et al.	2015	A descriptive cross-sectional design	Health belief regarding Severity perception disease severity ($r = .461$, $p = .001$) and ($r = .599$, $p = .000$), benefit ($r = .372$, $p = .008$), and ($r = .285$, $p = .045$), barrier ($r = -.637$, $p = .000$), and ($r = -.413$, $p = .003$), internal factors ($r = .613$, $p = .000$) and ($r = .759$, $p = .000$), risk in the first hospital ($r = .488$, $p = .000$), and health care providers in the second hospital ($r = .369$, $p = .008$) showed statistically significant associations with TA but the cues to action did not show statistical Significance.	Hypertensive patients had a high level of adherence to drugs (77.17%) and a low level of adherence to lifestyle modification (<75%).
19.	Ma et al.	2013	A longitudinal design	Increasing social support ($\beta = 0.27$, $p = .05$), higher education ($\beta = 0.19$, $p = .05$) and shorter duration ($\beta = 0.16$, $p = .05$) of diagnosis were related to higher adherence.	NOT reported the treatment adherence.
20.	Nashilongo et al.	2017	A descriptive cross-sectional observational design	Having a family support system ($OR = 5.4$, 95% CI 1.687–27.6, $p = 0.045$) and attendance of follow-up visits ($OR = 3.1$, 95% CI 1.1–8.7, $p = 0.03$) were significant predictors of treatment adherence.	There was no perfect adherence to anti-hypertensive therapy, and less than half had acceptable levels of adherence ($\geq 80\%$).