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ORIGINAL RESEARCH

MULTIDIMENSIONAL FAMILY THERAPY FOR YOUNG ADOLESCENT SUBSTANCE ABUSE IN INDONESIAN PRISONERS

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ABSTRACT

Research has established the dangers of early onset substance use for young adolescents and its links to a host of developmental problems. Because critical developmental detours can begin or be exacerbated during early adolescence, specialized interventions that target known risk and protective factors in this period are needed. This controlled trial (n=50) provided an experimental test comparing multidimensional family therapy (MDFT) and a peer group intervention with young teens. Participants were clinically referred, were of low income, and were mostly ethnic minority adolescents (average age 13.73 years). Treatments were manual guided, lasted 4 months, and were delivered by community agency therapists in clinical prisioners. Adolescents and parents were assessed at intake, at 6-weeks post-intake, at discharge, and at 3 and 6 months following treatment intake. Latent growth curve modeling analyses demonstrated the superior effectiveness of MDFT over the 6-month follow-up in reducing substance use (effect size: substance use frequency, d 0.77; substance use problems, d 0.74), delinquency (d 0.31), and internalized distress (d 0.54), and in reducing risk in family, peer, and school domains (d 0.27, 0.67, and 0.35, respectively) among young adolescents.

Keywords

young adolescents, adolescent substance abuse, delinquency , Multidimensional Family Therapy

INTRODUCTION

Substance use and abuse among early adolescents continue to be significant public health concerns. Although most recent national data trends show decreases in eighth-grade substance use, (Johnston, O'Malley, Bachman, & Schulenberg, 2008), 13% of eighth graders have reported use of an illicit drug in the past 12 months, and 5.5% have reported having been drunk in the past 30 days. Age of onset is one of the most powerful predictors of later substance use disorders, and longitudinal studies confirm that early initiators are at extremely high risk for serious and chronic sub stance abuse problems and a range of deleterious developmental outcomes (Flory, Lynam, Milich, Leukefeld, & Clayton, 2004). In fact, initiation of substance use and conduct problems before 15 years of age are among the strongest and most consistent predic- tors of chronic offending, depression, school failure and unem- ployment, relational problems with peers and family members, and low self-esteem throughout adolescence and into adulthood (Anthony & Petronis,

1995; McGue & Iacono, 2005). There is also increasing concern about the strong links between early onset substance use and closely correlated risky sexual behaviors that may lead to unplanned pregnancies, sexually transmitted diseases, and HIV infection (Stueve & O'Donnell, 2005). Even moderate use in the early adolescent years may compromise motivation and school achievement (Baumrind & Moselle, 1985; Friedman, Bransfield, & Kreisher, 1994), and these early initiators may develop a pattern of regular use before they are cognitively able to assess risks and possible consequences of use (Johnston, O'Malley, & Bachman, 2003)..

Treatment model developers now routinely adapt their interven- tions on the basis of risk factors and client characteristics (includ- ing individual and contextual factors) in different developmental stages (National Registry of Evidence-Based Programs and Prac- tices [NREPP], 2007). However, despite these basic research and clinical advances, the well-established negative trajectories of early initiators, and subsequent policy recommendations (Carnegie Council on Adolescent Development, 1995), few adolescent drug abuse treatment studies have focused on young adolescents. In fact, Williams and Chang (2000) have reported that 90% of ado- lescent substance abuse treatment studies had samples with an average age of between 15 and 17 years, and most studies included few young adolescents. Although significant progress has been made in the adolescent substance abuse specialty over the past decade (Dennis, 2003), there remains an inadequate empirical basis from which to make informed clinical decisions about the most effective interventions for young teens who have initiated substance use. Although there is currently a wealth of knowledge about effective treatments for older adolescent substance abusers, these findings may not apply to young teens, who have unique developmental issues and needs (Steinberg, 1991). Clearly, re- search is needed on early interventions for those youths already showing symptoms—teens who are most vulnerable for chronic substance abuse and a host of other problems.

Group treatment for substance abuse continues to be the most widely used intervention in public sector clinical work with adults (National Institute on Drug Abuse, 2007) and teenagers (Kaminer, 2005). Although controversy exists about its potential because of demonstrated iatrogenic effects (Dishion, McCord, & Poulin, 1999), group therapy with teens has not been found to demon- strate negative effects by other investigators and reviewers (Burleson, Kaminer, & Dennis, 2006; Weiss et al., 2005). Group approaches can be well defined, are capable of being manual guided, have been tested in a variety of adolescent treatment studies, and have demonstrated clinical and cost effectiveness (Dennis et al., 2004; French et al., 2008). How- ever, their success has been demonstrated mainly with middle and older adolescents (Dennis et al., 2004; Kaminer, 2005), with less research attention on younger teens.

Another approach is the use of comprehensive treatments to intervene with the family and the youth's natural environment. Research clearly shows that adolescent development occurs in an ecology of nested systems; critical familial influences (such as parental monitoring) as well as access to peers who use drugs and opportunities to use drugs are impacted by community contexts. Thus, ecological–contextual intervention models have been rec- ommended (Biglan, 1995), particularly for early intervention ef- forts, given the importance of social contextual factors in shaping developmental trajectories (R. Cohen & Siegel, 1991). These family-based, multiple-systems-oriented interventions are strongly recommended and widely researched (Drug Strategies, 2005). In fact, with adolescents generally, family-based treatments targeting the multiple realms of the teen's functioning and social environ- ment (e.g., Henggeler, Schoenwald, Borduin, Rowland, & Cun- ningham, 1998; Liddle, 2002) are recognized as among the most promising interventions for substance abuse and related problems. Most research on these models, however, has targeted

youths with an average age of 16 years. Thus, although group treatments are widely used and have empirical support, and family-oriented in- terventions are also identified as among the most effective treatments for teen substance abuse problems (Austin, Macgowan, & Wagner, 2005), less is known about the potential of these treatments with young adolescent substance abusers.

In the present study, we report 1-year outcomes of a controlled effectiveness trial that compared MDFT with peer group therapy with young teens (Liddle, Rowe, Dakof, Ungaro, & Henderson,
2004). In the initial publication, reporting only the pre–post results of this trial, MDFT outperformed a theory-driven, manual-guided peer group therapy model in reducing substance use and specific substance abuse–related problem behaviors over treatment. From pre–post treatment, MDFT youths improved more rapidly in all four targeted domains: individual, family, peer, and school. MDFT adolescents also demonstrated a trend toward comparatively greater reductions in delinquent behavior from pre–post treatment. Because the previously reported results addressed only the intake to treatment discharge period (3–4 months), longer term follow-up would be critical to determine sustainability of treatment effects. In this follow-up study, we hypothesized that through 12 months post-intake, MDFT youths would show less drug use, delinquency, and psychological distress than youths in group treatment; furthermore, given MDFT's greater effects on risk and protective factors in the family, peer, and school domains, outcomes would be sustained at the 1-year follow-up (Liddle et al., 2004).

METHOD

This study was implemented at Mojokerto Prisioner II Class, East Java Province, Indonesia. To be eligible for study participation, adolescents had to be (a) between the ages of 11 and 15 years; (b) referred for outpatient treatment for a substance abuse problem; (c) living with at least one parent or parent-figure who could participate in the assess- ments and therapy; (d) not in need of inpatient detoxification or other intensive services; and (e) not actively suicidal, demonstrat- ing psychotic symptoms, or diagnosed as mentally retarded.

Referrals to the study came from juvenile justice (45%), schools (41%), substance abuse/mental health facilities (2%), or other sources such as parents (12%). A total of 130 adolescents and families were screened for the study (see Figure 1). The research coordinator determined whether there was sufficient evidence of substance use even if the adolescent did not self-report use within the past 30 days on standardized measures. For instance, parents may have discovered evidence of drugs in the home, school officials may have had strong reason to suspect substance use, legal charges may have implicated substance use (e.g., drug pos- session), or the adolescent may have tested positive for substances on urine screens. Of the 130 referrals, 83 (64%) were eligible and consented to participate. The remainder did not meet the study's eligibility criteria, either because their problems warranted more intensive drug treatment (n 39) or they did not have any indication of substance use but instead needed outpatient treatment strictly for behavioral problems (n 8). These cases were referred to more appropriate services. There were no refusals to participate in the study from the sample of eligible cases (N 83).

A total of 61 male adolescents (74%) and 22 female adolescents (26%) living in Miami, Florida—with an average age of 13.73 years (SD 1.1)—participated in this study. Youths were ethni- cally diverse: 42% were Hispanic, 38% were African American,
11% were Haitian or Jamaican, 3% were White (non-Hispanic), and 4% were Other. Of the participants, 47% were involved in the juvenile justice system (on probation or awaiting a court hearing). Just over half (53%) resided in single parent homes, and the yearly median family income was $19,000. At intake, 47% of the participants met criteria for substance abuse, and 16% met criteria for substance dependence. Many youths met criteria for a comorbid

psychiatric disorder (39% for conduct disorder,
29% for attention-deficit/hyperactivity disorder, and 9% for a depressive disorder).

ETHICS REVIEW

Research Ethics Review by the Health Research Ethics Committee of the Bina Sehat PPNI University, No. 12/KEPK/UBS-PPNI/X/2025, dated October 4, 2025

RESULT

Descriptive Statistics

The distributions for substance use problems, frequency of substance use, and delinquency showed significant departure from normality (see Table 1). We created binary variables for two-part models, separating the zero responses from the con- tinuous outcomes. However, the distributions for the continuous outcomes remained nonnormal. Therefore, we used natural log transformation to improve the normality of these distributions (Olsen & Schafer, 2001), bringing skewness and kurtosis within acceptable ranges. Peer delinquency was also log transformed to achieve adequate normality.

Treatment Retention

We examined intervention acceptability and feasibility by com- paring each treatment's retention rates. MDFT demonstrated better treatment completion rates than group, 2(1, N 83) 4.94, p .05. A total of 97% of youths in MDFT completed treatment (approximately 120 days), compared with 72% in group therapy.

Two-part growth models were used to examine change in (a) substance use problems, (b) substance use frequency, and (c) self-reported delinquency. As a first step, we examined the func- tional form of growth for each part of the unconditional (i.e., excluding intervention status and background variables) two-part LGC following procedures outlined in B. Muthe´n (2001). First, we determined the functional form for trajectories in the categorical part of the model (e.g., abstinence vs. any substance use) using likelihood ratio difference tests for nested models. Having estab- lished the functional form for the categorical part of the model, we determined the functional form of the model's continuous part (e.g., substance use frequency) by selecting the two-part model that produced the smallest Bayesian Information Criterion. The functional form of the continuous model would typically be se- lected from a series of nested models. However, there were too few participants in this study reporting substance use problems to produce a proper solution.

Substance use problems. Linear models produced the best fit to the categorical part of the two-part model (i.e., presence vs. absence of substance use problems), and linear growth produced the best fit for the continuous part (i.e., number of substance use problems). Both treatments showed reductions in the number of youths reporting any substance use problems during the 1-year follow-up (pseudo z 4.29, p .001). Overall, adolescents reported an average of 2.5 substance-related problems at intake and showed significant decreases in the number of problems over the 12-month follow-up (log transformed; mean slope 0.24, pseudo z 8.35, p .001).

We then examined treatment effects by adding intervention condition to the model. With respect to the report of the number of substance-related problems (i.e., the continuous part of the model), results showed a significant intervention effect (b 0.14, pseudo z 10.47, p .001, 95% CI 0.16, 0.11), indicating more rapid decreases in substance problems over the 12-month follow-up period in MDFT. Results for any substance-related problems (i.e., the categorical part of the model) were not significant (b 0.34, pseudo z 1.27, ns). Model estimated mean trajectories for the two treatments are shown in Figure 2. The effect size for the continuous part of the model was d 1.36, a large effect (J. Cohen, 1988; see Brown et al., 2005, for procedures on calculating effect sizes for LGC models).

Frequency of substance use. Similarly, the functional form for trajectories of substance use frequency was best represented by linear growth in both the categorical (using or not using) and continuous parts of the model (i.e., number of days used in the past

30; with a fixed variance for the slope). At intake, participants who reported substance use averaged 4.66 days of use out of the last 30, with 18 youths receiving MDFT reporting using drugs at intake and 31 youths receiving group treatment reporting drug use. The proportion of youths abstaining from alcohol and drug use in- creased overall in the 12-month follow-up period (mean slope

2.05, pseudo z 4.39, p .001).

We found a significant intervention effect for the continuous part of the model (b 0.13, pseudo z 3.51, p .001, 95% CI 0.19, 0.05), as well as the categorical part of the model (b 0.73, pseudo z 2.98, p .003, 95% CI 0.24, 1.23). Youths in MDFT reported fewer days of substance use as well as a tendency to report increased abstinence from drugs and alcohol. Model-estimated mean trajectories for the treatments are shown in Figure 3. The intervention effect size for the continuous part of the model was d 0.77 (large), and the odds ratio (OR) 2.20 (moderate, 95% CI 0.77, 6.33) for the categorical part of the model.

DISCUSSION

Results of this 6-month follow-up study provide support for the effectiveness of MDFT with an understudied and vulnerable pop- ulation—clinically referred young adolescents. Previously, we re- ported the pre–post treatment results of this community-based randomized clinical trial, which largely favored MDFT (Liddle et al., 2004). The current study offers evidence that MDFT with clinically referred young teens reduced substance use and delin- quency, decreased risk for future problems, and promoted protec tive processes to a greater extent than group treatment over the 6-month follow-up period. Next, we summarize the findings and discuss the implications of these results.

First, both treatments demonstrated high treatment retention rates: 97% for MDFT and 72% for group treatment. Given the national average of only 27% completion (90 days) in standard outpatient treatment programs (Hser et al., 2001), both treatments in this study demonstrated much higher than average treatment retention rates. MDFT's ability to engage and retain almost all of the youths and families who were assigned to treatment is a sign of progress from early reports of family-based interventions and is consistent with more recent studies of family-based treatments utilizing home-based delivery methods. The engagement methods of both treatments offer hope to clinicians and researchers who have found adolescents unlikely to access services and difficult to engage and retain in treatment (D'Amico, McCarthy, Metrik, & Brown, 2004).

Second, although MDFT demonstrated superior results on mul- tiple outcomes than did the peer group treatment, it is important to recognize that the peer group treatment also was effective. Not only did this treatment have high retention rates compared with previous reports of community-based substance abuse treatment (Hser et al., 2001) but it also showed improvements in substance use, affiliation with delinquent peers, and internalized distress up to 12-month follow-up. The peer group treatment, however, did not appear to improve delinquency, family, and school outcomes. Third, youths who were assigned to MDFT showed more im- provement than youths assigned to the peer group treatment on a variety of outcome measures. From intake to 12 months later, youths in MDFT demonstrated more improvement than youths in peer group therapy in substance use, delinquency, internalized distress, affiliation with delinquent peers, and family and school functioning. Similarly, in terms of problems related to substance use—including psychological, interpersonal, school, legal, and familial consequences of

use—results favored the family-based over group treatment. Youths in MDFT reported almost no substance-related problems by the 1-year follow-up. Large effects support MDFT's ability to reduce substance use and the negative consequences of substance use among young adolescents.

With respect to delinquency outcomes, the results clearly dem- onstrate through the use of self-reports as well as objective court records that MDFT more significantly reduced delinquency than the group treatment. Frequency of self-reported delinquent acts was significantly reduced among MDFT youths over the 12-month study period, in comparison with an increase in delinquency among group treatment participants. Court record analyses showed that MDFT youths were less likely than group treatment teens to be arrested or placed on probation during the 12 months following intake. Given that delinquency and substance abuse are closely linked throughout different developmental stages (Paradise & Cauce, 2003), MDFT's reduction on both forms of problem be- havior is noteworthy.

Internalized distress was also more significantly reduced in MDFT than group treatment. Examining trajectories from intake to 12 months showed a moderate effect of MDFT over group treat- ment in reducing symptoms of general mental distress. Because internalizing problems are linked to initiation and exacerbation of substance abuse over time, treatment relapse, and interpersonal problems in young adulthood (Capaldi & Stoolmiller, 1999; Clark,

2004), reduction of mental distress is not only a key primary outcome but it also has important prevention implications as well. Results reveal essential differences in youths' views of their family interactions over time according to treatment condition. MDFT youths reported more significant increases in positive fam- ily interactions than group treatment youths from pre- to posttreat- ment, and these gains were maintained at the 12-month assess- ment. These changes include core relationship characteristics (such as parental involvement and acceptance) as well as parenting practices (such as monitoring and consistency in discipline and limit setting). Despite the group treatment's primary focus on changing peer relationships, MDFT influenced affiliation with delinquent peers more significantly than the group treatment. Al- though both conditions demonstrated certain reductions in youths' affiliation with delinquent peers over treatment, the large effect size for the treatment effect indicates the significantly greater impact of MDFT on youths' peer affiliation. Substance abusing young adolescents are particularly vulnerable to negative peers as they become removed from prosocial extracurricular activities that provide opportunities for positive identity formation and the de- velopment of self-esteem (Shilts, 1991). Because of the strong influence of the peer group on young adolescents' substance use and problem behaviors, change in the peer environment is a predictor of long-term intervention success (Dishion & Medici-Skaggs, 2000).

Of all the outcomes investigated, those for school functioning are the weakest. Youths in group treatment fared poorly on school outcomes. Group treatment youths had increased absences and had declining conduct grades from the year prior to treatment and the year following treatment intake. Although MDFT youths did not show a decline in school functioning, they did not show much improvement either. They showed very little improvement in ab- sence rates and academic grades over the 12-month period, but they did improve their conduct grades. A previous MDFT study did show significant changes in school attendance and grades with a sample of slightly older, but similarly ethnically diverse adoles- cents (Liddle et al., 2001).

Strengths

In this study, we addressed previous criticisms of treatment research (Austin et al., 2005). We tested two theoretically and clinically distinct interventions, representing the two most com- monly used types of

adolescent substance abuse treatments. In addition to treatment target differences (i.e., family relationships in MDFT vs. changes in individual functioning brought about through group therapy participation), the intended scope of the treatments differed as well. The family-based intervention addressed the literature's recommendation that treatments should be more comprehensive—targeting more areas of the adolescent's social context than previous treatments have done. Assessments included state of the science measures and theory-related assessments of youth and family in a broad range of developmentally important domains (Weisz, Sndler, Durlak, & Anton, 2005). The study also included multiple methods (archived records and self- report) and different reporters (youth and parent).
Both conditions were manual-guided and led by experts in each treatment. Study therapists were not graduate students or research therapists but community agency-employed clinicians, and cases

Were clinically referred—the usual cases in the agency's caseload. Therapists were monitored to ensure adherence to model-specific interventions, and we conducted a formal adherence evaluation using standardized fidelity instrumentation. In one review of ado- lescent and child treatment research, only 32% of published studies trained the therapists formally, and only 32% used supervision procedures or adherence checks to ensure treatment fidelity (Weisz et al., 2005). We used intent-to-treat design and analyses (analyses of treatment completers showed identical findings to those re- ported in the Results section), and study retention and data capture rates (97%) were excellent. This is not insignificant given the documented difficulties of obtaining adequate follow-up data with clinically referred, diverse adolescent samples (Meyers, Webb, Frantz, & Randall, 2003). Effect sizes are reported to demonstrate clinical significance of the findings.

Limitations

The findings may apply only to urban, low-income African American and Hispanic male youths because this is the predomi- nant description of the present sample. An increased sample size may have uncovered more reliable and stable effects in the tar- geted domains as well as reduced the number of potentially spu- rious findings, which may have resulted from the large number of statistical tests performed relative to the small sample size. Also, although we were able to implement a fully randomized trial with adequate methodological safeguards to maximize internal validity, we conducted only a single-site study. A multisite study would permit site difference tests and could also increase the heterogeneity of setting and sample variables and thus expand the study's generalizability even further. Also, we cannot deny the fact that although the comparative treatment, peer group therapy, was manualized, delivered by experienced and skilled community cli- nicians, and resulted in certain positive outcomes (i.e., retention, and improvement in drug use, affiliation with delinquency peers, and internalized distress), MDFT has been more thoroughly re- searched, and its developer (Howard A. Liddle) is an investigator on this study. Although we took extreme care to minimize inves- tigator bias (e.g., Howard A. Liddle was not involved in the delivery of the intervention; research and clinical teams were completely separate; and we used other standard scientific meth- ods such as random assignment), we cannot completely discount the possibility of investigator bias.
In conclusion, the results provide evidence that MDFT can alter progression of a negative developmental trajectory (Kandel, Davies, Karus, & Yamaguchi's, 1986, cascade effect) with youths evidencing multiple risk factors—circumstances that can set the stage for chronic substance abuse and delinquency. This study adds to the body of knowledge about the outcomes (Liddle, 2002; Liddle et al., 2001; Liddle, Dakof, Turner, Henderson, & Green- baum, 2008) and mechanisms of action (Diamond & Liddle, 1996; Robbins et al., 2006) previously recognized with the MDFT ap-

proach (Austin et al., 2005; Brannigan, Schackman, Falco, & Millman, 2004; NREPP, 2007; Vaughn & Howard, 2004; Waldron
& Turner, 2008). Early substance use and delinquency are among the most robust predictors of severe substance use, criminality, and pervasive difficulties across life domains in later adolescence and adulthood, and current estimates indicate about 60% of adolescents relapse within 3–12 months of completing substance use treatment

(Burleson & Kaminer, 2007). Thus, the fact that a comprehensive but relatively brief, family-based treatment can alter the trajecto- ries of clinically referred youths for at least 12 months gives cause for optimism. The adolescent drug treatment field has been influenced by the research on the effectiveness of family-based therapies for teen drug abuse (Williams & Chang, 2000). These interventions are based on an ecological–contextual view of drug and behavior problems (Biglan, 1995). However, despite recommendations for practice changes to include parents and implement family-based therapies with substance abusing and juvenile offender samples (Drug Strategies, 2005), progress remains minimal. The availabil- ity of training to use these approaches in usual care settings is a major stumbling block. Treatment settings are often not organized to work with families, do home visits, work evening hours, or make appearances at school or juvenile justice/court meetings. Although treatment models have been found to be effective, the same cannot be said for implementation models. As these thera- pies' clinical effectiveness becomes more widely known, stronger support for early intervention, a topic of particular relevance for the current sample, may become an item on the national policy agenda (Cullen, Vose, Jonson & Unnever, 2007; Liddle & Frank, 2006). Time will tell.-

REFERENCES

Ajzen, I. 1991. *The Theory of Planned Behavior. Organizational Behavior and Human Decision Processes*.

Andika, Muhamad, and Sasmita Saputra. 2018. "Head Room Supervision to Completeness of Note Nursing Care Documentation." 3(10). doi:10.17605/OSF.IO/CWZ53.

Arikunto, S. 2013. *Prosedur Penelitian: Suatu Pendekatan Praktek (Edisi Revisi).* ed. Rineka Cipta. Jakarta.

Article, Original. 2008. "A 36-Hospital Time and Motion Study : How Do Medical-Surgical Nurses Spend Their Time ?" 12(3): 25–34.

Basalamah, M. S. A., & As'ad, A. 2021. "The Role of Work Motivation and Work Environment in Improving Job Satisfaction. Golden Ratio of Human Resource Management,."

Bosch-capblanch, Xavier, and Paul Garner. 2008. "Primary Health Care Supervision in Developing Countries." 13(3): 369–83. doi:10.1111/j.1365-3156.2008.02012.x.

Bowers, Barbara J. 2015. "How Nurses Manage Time and Work in Long-Term Care." (November). doi:10.1046/j.1365-2648.2001.01686.x.

Bunting, Jeanette, and Melissa De Klerk. *Strategies to Improve Compliance with*

Clinical Nursing Documentation Guidelines in the Acute Hospital Setting : A Systematic Review and Analysis. doi:10.1177/23779608221075165.

Documentation, Nursing. 2024. "Competency, Motivation, and Supervision Technique Strong Predict to Completeness of Nursing Documentation." 7(5): 164–72. doi:10.35654/ijnhs.v7i5.800.

Farokhzadian, Jamileh, Nahid Dehghan Nayeri, and Fariba Borhani. 2018. "The Long Way Ahead to Achieve an Effective Patient Safety Culture : Challenges Perceived by Nurses." : 1–13.

Kilminster, S M, and B C Jolly. 2000. "Effective Supervision in Clinical Practice Settings : A Literature Review *." : 827–40.

Lufianti, A., & Keristiyani. 2023. "Correlation Between Nurse Motivation and the Quality of Nursing Care Documentation." *General Nursing Science Journal* 4(2): 329–33.

McDonald, J., & McArthur, C. 2019. "Improving Nursing Documentation Practices: A Review of the Evidence." *Journal of Nursing Administration,* 49(1): 5–12.

Meade, Christine. 2020. "Effects of Nursing Rounds." (September 2006). doi:10.1097/00000446-200609000-00029.

Negarandeh, R., Mahmoodi, H., & Haghani, S. 2020. "Barriers to Self-Care Among Patients with Heart Failure: A Qualitative Study." *Iranian Journal of Nursing and Midwifery Research* 25(6): 471–477.

Wahyuni, D. E., Asmoro, C. P., & Susiana, E. 2019. "Faktor Yang Berhubungan Dengan Mutu Pendokumentasian Asuhan Keperawatan Di RSUD Dr. Soetomo Surabaya." *Fundamental and Management Nursing JournalJ*: 16–23.