Published in final edited form as:

Res Gerontol Nurs. 2013 April ; 6(2): 98–106. doi:10.3928/19404921-20130114-01.

Depression Treatment in Assisted Living Settings: Is an Innovative Approach Feasible?

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Abstract

Depression is a common, disabling and under-recognized problem among older adults in assisted living (AL) settings. The purpose of this study was to evaluate stakeholder perceptions of using a blended model of depression care that combines essential features of evidence-based collaborative care and elderly outreach for use in AL settings. A descriptive design using mixed methods was used to assess perceptions of the three main components of the depression model: onsite depression care management, staff development activities, and AL nurses as staff resources and liaisons to primary care providers. Quantitative and narrative responses were consistently positive and supportive of depression care approaches. Potential barriers included time constraints for staff and costs for residents. These data provide strong support for further evaluation of the blended depression model. Staff development activities may be implemented independent of the model to enhance depression recognition, assessment and daily care approaches in AL.

Late life depression is a large and growing public health problem that will soon be only second to heart disease in terms of global health burden (Chapman & Perry, 2008; Lyness, Yu, Tang, Tu, & Conwell, 2009). Depression is strongly associated with functional impairment and disability in older adults, and is both emotionally and financially costly to individuals and society (Lyness et al., 2007; Unutzer et al., 2009). This often devastating illness is particularly important to consider in assisted living setting where 1 in 4 older adults (24 to 27%) have clinically significant depression symptoms (Adams & Moon, 2009; Watson et al., 2006).

The importance of recognizing and treating depression symptoms in AL residents is supported by several factors. First, the characteristics of AL residents are highly consistent with known risk factors for major depression, including functional limitations, advanced age, living alone, and having presence of clinically significant depression symptoms (Cole, McCusker, Ciampi, & Belzile, 2008; Lyness, et al., 2009; van't Veer-Tazelaar et al., 2008). Second, AL staff often dismiss depression-related symptoms as part of aging instead of recognizing them as being a treatable illness (Davison, McCabe, Mellor, Karantzas, & George, 2009). Third, the very signs and symptoms of depression – dysphoria, anhedonia, anorexia, insomnia, fatigue, concentration impairment, feeling helpless, hopeless, or that life isn't worth living – may reduce engagement in essential self-care routines that are needed to

maintain overall health and tenure in AL. The “cycle of depression” that occurs as depression-related behaviors, thoughts, and feelings interact with social stress and physical health problems often perpetuates distress and dysfunction (IMPACT, 2009) and, in turn, jeopardizes staying in the AL setting. Collectively, these factors suggest that a multi-component approach to improve depression recognition and provide early interventions may improve health outcomes, increase function (Frederick et al., 2007), and in turn, facilitate older people's ability to “age in place” in their preferred living environment.

The purpose of this paper is to describe a newly developed model of care, Depression Treatment for Assisted Living (DT-AL), and outcomes of a feasibility study designed to evaluate key features of the intervention. Three specific aims were addressed: 1) to determine AL staff and resident perceptions of *on-site care manager services*; 2) to evaluate depression focused *staff development activities* for use in AL settings; and 3) to assess perceptions of using RN leaders as a *staff resource person and liaison* person. Theoretical underpinnings and rationale for the DT-AL model are presented first, followed by description of the mixed-method study.

Depression Treatment for Assisted Living (DT-AL) Model

The multi-component DT-AL model is theoretically linked to depression prevention and goals of reducing functional impairment, disability and higher overall health care costs that are associated with late-life depression (Lyness, et al., 2009; Strine et al., 2009; Unutzer, et al., 2009). The model strategically blends two successful evidence-based approaches to depression recognition and care: Improving Mood Providing Access to Collaborative Treatment (IMPACT) (Unutzer et al., 2002), a collaborative depression care management model, and Psychogeriatric Assessment and Treatment in City Housing (PATCH) (Rabins et al., 2000), an elderly outreach model. The blended DT-AT model builds on, and extends care approaches successfully used in IMPACT and PATCH, as illustrated in Table 1. The three main components of the DT-AL model are briefly described to frame methods used in the descriptive study.

Enhanced Collaborative Care Management

Collaborative depression care management is a widely recognized evidence-based practice for treating late life depression in home and primary care settings (Frederick, et al., 2007). In DT-AL, the specially trained depression care manager is called an Enhanced Care Manager (aka Care Manager in this paper) to improve acceptability to older adults. Like IMPACT, the collaborative care team includes an off-site psychiatrist who consults with the Care Manager about treatment, and the AL resident's regular primary care provider (PCP). In addition, the DT-AL model includes the AL registered nurse (RN) who acts as the staff resource person and liaison to the PCP, and staff development activities for AL staff who provide daily care. The larger circle of collaborators and broader focus on daily interactions is aimed at creating an environment in which depression is viewed as an illness, contributing factors are understood, and all providers share responsibility to help the older person avert illness, maintain function, and engage in enjoyable, health-promoting activities.

Staff Development

Staff development activities help AL staff not only recognize depression, but also help them collaborate with the RN leader and Care Manager to incorporate depression-sensitive approaches and interventions into their daily care routines. Three key issues related to changing daily care practices include: 1) recognizing depression; 2) talking with older adults about depression; and 3) adjusting daily care approaches and interventions to increase function and reduce depression-related problems that are too often “accepted” as being consequences of advanced age and ill health.

RN Staff Resource & Liaison

The third component is unique to DT-AL, and involves the RN leader in the AL residence serving as a depression resource person for staff and a liaison to the older person's primary care provider. The goal is to help AL nurses build depression-related skills that endure beyond the intervention. Additional RN role support is provided by the Care Manager as s/he provides depression care services to older adults in the AL facility.

DT-AL Feasibility Study

The year-long descriptive feasibility study was designed to critically review DT-AL components with AL stakeholders before conducting a clinical trial. Materials were reviewed and critiqued related to their acceptability (reaction to the intervention and/or approaches used), practicality (constraints related to time, resources, commitment), and anticipated implementation issues (Bowen et al., 2009). The relevance and usefulness of strategies, topics and approaches were a primary focus. The principal investigator and graduate research assistant developed evaluation tools/methods, conducted assessments and interviews, and entered and analyzed data. The study was approved and monitored by the university's Institutional Review Board.

Study Methods

Setting and sample—A convenience sample of AL facilities located in the geographic region surrounding the university was sought. Because the goal was to gather different perspectives and views of factors that may affect the DT-AL model, large (≥ 60 residents), medium (20 to 59 residents) and small (<20 residents) AL facilities in rural and urban settings were sought. The sample size of 30 participants (3 RN leaders, 15 additional staff and 12 residents) was a conservative estimate based on the time frame and financial support available. Older adults were invited to participate by the RN leader.

Instruments/data collection—Staff and resident background forms included age, sex, ethnicity, educational level, years living/working in AL settings, and prior depression education (staff). Satisfaction with work (staff) or living in AL (residents) was rated on a 10 point scale with anchors of 1=very dissatisfied to 10=very satisfied. Paper evaluations were developed to rate features of the three DT-AL components, as described in Table 2. Quantitative items were rated on a 6-point scale where 1=negative value and 6=positive value. Each scale contained definitions and explanations to guide ratings. Open-ended questions encouraged participants to add “other” ideas or comments and/or “list the 3 most

important” issues related to selected topics. Semi-structured interviews and discussions were conducted with individuals and small groups.

Study procedures—From 5 to 8 site visits were made to each AL facility to conduct study activities after enrollment. Sections of a Staff Resource/Liaison Manual were provided sequentially to RN leaders to allow time for their review and critique. Small group discussions with AL staff and residents were conducted on the last visit. All programs were scheduled at the convenience of staff and were repeated as needed.

Data entry/analysis—Numeric and narrative responses to questions were entered on a secure Windows-based PC using REDCap electronic data capture tools (Harris et al., 2009) hosted by the university. Quantitative data were examined using frequency distributions, means, and median scores. Answers to open-ended questions, audio-recorded interviews, and narrative notes were examined using inductive content analysis procedures (Elo & Kyngas, 2007).

Results

Four AL facilities agreed to participate, including one large (84 residents), two medium-sized (23 and 25 residents) and one small (9 residents) program. The facilities were located in rural and urban settings (2 each). All provided independent housing services in addition to assisted living, and one also provided nursing facility care on the same campus.

A total of 18 AL staff participants were enrolled, including 5 RNs, 4 certified medication assistants, 3 certified nursing assistants, 3 universal workers, 2 administrators and 1 licensed practical nurse (LPN). Additional roles played by staff including assistance with housekeeping (n=7), dietary (n=6), activity (n=6), and maintenance (2). Staff participants were 95% female (1 male), white (100%), 28 to 65 years old (Median=42.2), and had been employed from 1 to 7 years in their current position (Median=2 years). Educational levels included less than high school (6%), high school (33%), and college (1 to 4 years; 61%). Four (22%) reported attending depression education programs prior to the study. Satisfaction with work in AL clustered around anchors of very satisfied (56%) and somewhat satisfied (38%). One person (6%) that indicated s/he was very dissatisfied terminated employment before the second visit.

Fifteen (15) resident participants were enrolled. Resident participants were largely females (80%), aged 62 to 96 years old (Median=90 years) who were white (100%) and had lived in AL from 1 to 7 years (Median=3 years). Educational levels included less than high school (33%), high school (20%), college (33%) and graduate degrees (13%). Satisfaction with living in AL ranged from being somewhat (67%) to very (33%) satisfied.

Staff Development Activities

Topic Evaluation—Eighteen AL staff completed evaluations. All three topics were given high scores (on the 6-point scale), resulting in means (M) of 5.8 for Recognizing Depression, 5.3 for Talking about Depression and 5.8 for Adjusting Care Approaches and Interventions. Participants preferred in-person training (M=5.8) over CD, DVD, video or

web-based approaches (M = 4.7). Small group discussions about common problems and real cases were the most popular training approaches (both M=5.6 vs. 4.8 for handouts, case studies or homework). Supportive educational brochures about depression for residents and families (M=5.3) were favored over pocket cards, posters or web-based resources (M = 4.7).

Responses to the request for things that are likely to interfere with using approaches to support and assist depressed older adults clustered into two main themes. Perceptions of resistance among older adults was reflected in comments such as *Most people will not open up to us and talk about depression; They may not agree that they are depressed (denial); Residents do not want to engage in activities; and Them [elders] not being able to find something enjoyable to do or be active.* The second main theme, time constraints, included comments such as *Not having enough time to always listen to all the tenants' problems and feelings and Time it might take to sit and listen to a person talk about how they feel because you have other things to get done, and also other people to take care of.* Possible strategies to overcome these challenges clustered in to two main themes. The first theme, improved depression-related resources and skills, included statements such as *A brochure to show the adult what it is and it's okay to talk; Be educated enough to recognize the symptoms of depression; and Good advice on what to say.* The second theme, improved facility resources, included statements such as *More staff; and Ability to spend more 1:1 time with residents.*

Program Evaluations—The Topic Evaluation results guided the development of the three short staff development programs that were implemented and evaluated by AL staff. Each topic received high ratings on items relating to knowledge and care (M=4.8 to 6.0). Responses to open-ended questions were similarly positive. Common themes included increased understanding and awareness of depression among residents, the importance of using standardized depression rating scales to quantify and monitor symptoms, and the value of making “simple” adjustments in daily care routines to promote self-care, social and activity engagement.

Staff Resource/Liaison Manual and Materials

Responses by five RN participants reflected a combination of appreciation for the ideas and concerns about time constraints. See Table 3 for item examples. RN role ratings were slightly higher when items rated for their perceived usefulness (4.8 to 5.8) versus their feasibility (4.0 to 5.5).

Enhanced Care Manager Role

Structured small group discussions with AL staff (N=14) and residents (N=15) resulted in a large number of positive comments and support for the Care Manager role. Staff supported the provision of onsite depression services. Staff viewed residents as being very private, but also noted that having outside health providers was common and unlikely to elicit gossip that would impede service use. All RN leaders reported having good working relationships with primary care providers and anticipated that most physicians would cooperate. However, they also acknowledged *It depends on the physician.* Time constraints for staff development activities and the goal of engaging 50% of staff were also a concern.

Resident discussions included a mixture of general statements related to problems with mood, adjusting to AL care, and making friends, and thoughts about Care Manager roles. Although residents with depression were not recruited for the discussions, 4 of 15 participants (27%) volunteered information about their personal experiences with depression. Resident participants were supportive of on-site services, such as *This is all going to take place here. We don't have to go out? Well, I think that would be good! and I can see how that would be very beneficial.* While some expressed concern about burdening already busy staff (*Would it generate a lot more paperwork for people who are already overwhelmed by it?*), others considered the assistance part of their caregiver's job (*They should be doing those things, shouldn't they? I think its part of their job.*) Gossip was accepted as a norm and was not viewed as a barrier to Care Manager services: *What they think, they think. You're not gonna change their mind. When you get past 80, it don't matter.* Opinions about their physician's support of Care Manager services were mixed, as some agreed it was important and others didn't think they needed to be involved: *Do you think my doctor would mind if I saw someone of my choosing? Well, I don't see how he'd have anything to say about it!* The cost of the services was a main concern and was discussed in the light of high costs for AL care, medications, and health care, such as *My question is whether cost would be the biggest thing. We are already paying as much rent as we want to be paying. We're all in the same boat!*

Discussion and Conclusions

The DT-AL model has considerable potential to reduce the distress, disability, and costs of late life depression by taking services to AL, a setting that is both increasingly popular, and populated with older adults who experience multiple depression risk factors. The findings indicate that the three main components were acceptable and practical for use in AL, and that approaches to care were viewed as relevant and useful. Potential barriers were few and largely revolved around resident concerns about time constraints for staff, service costs, and including the primary care provider.

An important first observation is that the feedback from the staff development activities indicates that AL staff valued gaining depression-related knowledge and skills, particularly related to depression recognition, using standardized scales to quantify symptoms, and making “simple” changes in daily care to promote health. Staff members also valued information about adjusting their communication with depressed older adults (e.g., listening, accepting feelings). Both paper ratings of the program and staff interviews conducted four months later supported the value of helping staff better interact with residents.

A second important observation is that AL nurses in the study were both supportive of depression care for their residents and willing to assume additional roles to facilitate care and treatment. Their roles in depression care were viewed as both beneficial to resident care (useful) and practical to do in terms of time and resources (feasible). Of note, three RN activities that were top-rated for being both useful and feasible for AL nurses may be enacted outside of the DT-AL model, including identifying depression-related problems among tenants, assessing depression using the PHQ-9 depression scale, and interacting with the primary care provider about antidepressant medications. Additional daily roles were

considered useful, but slightly less feasible, such as helping family members and staff understand, communicate, and intervene with depressed elders. The time needed to support and assist staff is a real-life concern for busy nurses who are often the only RN in the AL setting. As AL moves away from a hospitality model to address the often complex medical conditions of residents, advocacy for diverse RN contributions as a standard component of AL care (Vance, 2008) is essential.

A third important observation was that nurses believed that they could gain cooperation with tenants' primary care providers related to depression care, but were somewhat less certain about the level of support that would be extended for depression-specific care. That finding is understandable considering that adoption of beneficial depression care practices like screening or collaborative care is not widespread in primary care settings (Frederick, et al., 2007). Implementation of the DT-AL model, or even traditional depression care in cooperation with the primary care providers, may rely on nurses taking advocacy and educational roles to promote optimal outcomes for older adults in their care.

Finally, Care Manager roles were perceived as being achievable by nurses, AL staff and residents alike. The paper ratings and interview data suggested that staff thought older adults would be receptive to care, but they were less certain about whether older adults would cooperate in treatment approaches like problem-solving therapy or behavioral activation (pleasant activity scheduling). In contrast, feedback from older adults in the small group interviews suggested that help to solve problems and restore activity levels would be valued. Participant's personal stories related to the challenges of transitioning to AL care, difficulty re-establishing friendships and enjoyable routines, and experiences with depression underscored possible roles for the Care Manager. Furthermore, the difference between staff perceptions of residents and resident's self reports is an important consideration that is reported in the other late-life depression research (McCabe, Davison, Mellor, & George, 2009; Mellor, Davison, McCabe, & George, 2008). As suggested in this and other studies, attitudes and beliefs among caregivers about older adults' willingness to recognize depression, talk about their feelings, or participate in treatment may pose serious barriers to helping depressed older adults. Superior outcomes are consistently achieved when providers talk openly about depression and older adults' preferences for depression treatment (Unutzer, et al., 2002).

Like most small studies, this one has several limitations. First, the facilities and participants were volunteers. Other facilities may not have the same level of interest and/or commitment to changing depression care practices. Second, the small sample size and restricted geographic region provides a limited view. However, characteristics of staff and resident samples are highly consistent with reports about AL throughout the state and nation (NCAL, 2012). Although staff development activities were implemented during the study, Care Manager roles were not. Perceptions of the RN and Care Manager roles were gathered, but implementation-related issues will need to be assessed further in the next study. Other potential limitations relate to the model itself. DT-AL is designed for use with older adults who have sufficient cognitive capacity to self-report depression symptoms and use problem-solving activities to restore function. The model also relies on having an available and willing RN leader in the AL. Given that only 30% of states have AL rules requiring RN

services (NCAL, 2011) further adaptations may be needed to fit the model to state-driven or individual facility policies.

In conclusion, these findings suggest that AL nurses and staff caregivers are both aware of depression and receptive to assistance. Staff development activities may be used independent of the DT-AL model to enhance depression recognition, promote use of standardized scales to detect and monitor symptoms, and encourage adjustments in daily routines to promote health-related activities among elders. Findings also provide an important foundation for further evaluating DT-AL as an innovative approach to depression care in AL settings.

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Table 1
Key Components of PATCH, IMPACT, and the DT-AL Model

Service Component/Feature	PATCH	IMPACT	DT-AL
<i>Care Coordination Team:</i>			
Care manager	×	×	×
Consulting psychiatrist	×	×	×
Primary care provider		×	×
RN leader in AL facility			×
AL staff members			×
<i>Care Manager Services:</i>			
Comprehensive assessment	×	×	×
Treatment plan development, implementation & review	×	×	×
Consultation with psychiatrist	×	×	×
Consultation with primary care provider		×	×
Time-limited treatment		×	×
Depression relapse plan		×	×
Referral for on-going care		×	×
Staff training/development	×		×
Nurse resource-liaison training & support			×
<i>Staff Training/Development focus:</i>			
Recognize mental health problem/depression	×		×
Refer for evaluation & treatment	×		×
Assess depression symptoms			×
Promote communication/talking about feelings			×
Adjust daily routines/promote self-care			×
Encourage activity participation			×
<i>RN Staff Resource & Liaison role:</i>			
Conduct depression screenings/assessments			×
Make referrals to Care Manager for treatment			×
Assist staff to promote “anti-depressant” activities			×
Interact with PCP related to care recommendations			×

PATCH is Psychogeriatric Assessment and Treatment in City Housing; IMPACT is Improving Mood Providing Access to Collaborative Treatment; DT-AL is Depression Treatment for Assisted Living; AL is assisted living; PCP is primary care provider

Table 2
DT-AL Feasibility Issues and Evaluation Methods

Model Component: Issues	Evaluation Approach/Scale Names and Descriptions
<i>Staff Development Activities:</i> <ul style="list-style-type: none"> • Topic relevance to AL care • Preferred training method, content, format, length • Facility-related barriers • Staff motivation/interest 	Paper evaluations: <ul style="list-style-type: none"> • <u>Topic Evaluation</u>: 3 topic items; 14 training methods items; 2 open-ended questions • <u>Part 1 Depression Recognition</u>: 20 knowledge/care items; 5 training methods items; 4 open-ended questions • <u>Part 2 Talking about Depression</u>: 24 knowledge/care items; 5 training methods items; 4 open-ended questions • <u>Part 3 Changing Care Approaches & Interventions</u>: 26 knowledge/care items; 5 training methods items; 4 open-ended questions
	Training trial with small groups of AL staff
<i>Staff Resource & Liaison Role for RNs:</i> <ul style="list-style-type: none"> • Usefulness to RN leader • Practicality for RN leader • Acceptability to primary care providers • Resource Manual format, content 	Paper evaluations: <ul style="list-style-type: none"> • <u>Staff Resource/Liaison Role Evaluation</u>: 20 role items rated for twice: usefulness and feasibility; 2 open-ended questions • <u>Primary Care Provider Involvement Evaluation</u>: 16 role items; 6 open-ended questions • <u>Staff Resource/Liaison Manual Evaluation</u>: 8 items (one for each section) rated three times: understandable, useful, right amount of material; 5 open-ended questions
	Discussions with RN leaders
<i>Enhanced Care Manager Roles:</i> <ul style="list-style-type: none"> • Acceptability to RN leaders and staff • Acceptability to AL residents • Perceived barriers 	Paper evaluations: <ul style="list-style-type: none"> • <u>Enhanced Care Manager Role Evaluation</u>: 32 older adult care/treatment items; 7 staff development items; 2 open-ended questions
	Small group discussions: <ul style="list-style-type: none"> • RN leaders and AL staff • AL residents

AL is assisted living; RN is registered nurse

Table 3
Examples of RN and Care Manager Roles¹

Staff Resource & Liaison Role Evaluation (N=5)	Mean (SD) Useful²	Mean (SD) Feasible²
Identifying depression-related problems among tenants	5.8 (0.4)	5.4 (0.5)
Assessing depression using the PHQ-9 depression scale	5.6 (0.9)	5.4 (0.5)
Sending Care Manager reports to the PCP	5.6 (0.5)	5.2 (0.8)
Helping AL staff identify “antidepressant activities”	5.4 (0.5)	4.8 (1.3)
Helping daily staff use depression-related interventions	5.2 (0.8)	4.0 (1.8)
Helping daily staff communicate with depressed elders	5.2 (0.8)	4.6 (2.0)
Helping family members understand depression as an illness	5.0 (1.0)	4.6 (1.1)
Helping residents understand depression as an illness	5.0 (1.0)	4.2 (0.8)
Primary Care Provider Involvement Evaluation (N=5)		Likelihood³
Reads care notes faxed by the RN leader re: person's care & treatment		5.0 (0.8)
Addresses contributing problems (like pain relief) when the RN leader or older person ask for help		5.0 (0.8)
Uses Care Manager/Consulting psychiatrist recommendations to prescribe or change antidepressant medications		4.3 (1.0)
Supports the RN leader/assisted living residence related to depression identification/treatment		4.3 (1.5)
Enhanced Care Manager Role Evaluation (N=5)		Feasible⁴
<i>Older adult care/treatment approaches & interventions</i> (32 items)		
Getting the RN leader to fax notes to the primary care provider		6.0 (0.0)
Making referrals for continuing care if needed		5.5 (0.6)
Getting the person to <u>identify</u> pleasant activities		5.0 (0.8)
Getting the person to <u>engage</u> in pleasant activities		4.0 (0.8)
Getting the person to <u>record</u> how often activities are done		3.3 (1.2)
Getting the person to identify problems for problem-solving therapy		3.0 (0.8)
<i>Assisted living staff interactions & assistance</i> (9 items)		
Getting the RN leader & staff to identify tenants with depression symptoms		5.8 (0.5)
Training staff about depression & its treatment		5.5 (0.6)
Getting staff to encourage activity involvement		4.8 (1.0)
Getting at least 50% of staff to attend staff educational programs		3.3 (1.5)

¹ Items are examples from paper scales that were rated from 1=negative value (not useful, not feasible, not likely) to 6=positive value (useful, feasible, likely). Mean scores and standard deviations (SD) are reported.

² 20 RN Roles were rated twice, once for usefulness and again for feasibility.

³ 16 roles were rated on how likely the primary care provider will be to cooperate, support, and engage with the RN leader and/or the treatment team.

⁴ Items were rated for the likelihood that the Care Manager will be successful. PHQ-9 is Patient Health Questionnaire depression scale; PCP is primary care provider.