OPEN LETTER

The 12 Ds of geriatric medical-psychiatry: A new format for geriatric case presentation [version 1; peer review: awaiting peer review]

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Abstract
Background: We present a new format for geriatric case presentation called the 12 Ds of Geriatric Medical-Psychiatry that facilitates an integrated discussion of both the physical and mental health issues that pertain to any geriatric patient. The format can be used to replace or to complement traditional medical model case presentation and can also be used as a teaching aid to provide the parameters for a holistic view of the geriatric patient.

Methods: We developed the 12 Ds of Geriatric Medical-Psychiatry for case presentation by modifying the SBAR (situation, background, assessment, recommendations) with 12 clinical considerations that apply to any geriatric patient.

Following implementation of the 12 Ds of Geriatric Medical-Psychiatry case presentation in our integrated team of geriatric medicine and psychiatry healthcare providers, we successfully used the 12 Ds model to present more than 180 patients and found the model easy to use and well received by learners and colleagues.

Conclusion: The 12 Ds of Geriatric Medical-Psychiatry provides a comprehensive format to discuss the pertinent issues facing geriatric patients. When used in an SBAR format, it appears to be an efficient means for integrated case presentation and/or can be used as a tool for teaching and understanding a holistic view of complex geriatric cases.

Keywords
geriatric psychiatry, collaborative care, care management, integrated care, mental health
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Introduction
With increasing age, multi-morbidities that include both mental and physical health problems become more prevalent. Traditionally, the health care system is organized according to disease categories which can result in fragmented care across multiple health care providers (Geist et al., 2020; Stange et al., 2010). New and innovative integrated care models, such as collaborative care, are promising solutions to provide optimal care to people suffering from multi-morbidities that include both mental and physical health problem. Collaborative care models are designed to support primary care providers in integrating care for patients with both mental and physical health problems. The model emphasizes the care intersections among different health conditions, the need for care coordination and the different roles of the health care professionals from various disciplines (Wollmann et al., 2012). Adopting collaborative care models often requires healthcare professionals to change the way they work which can form a barrier to adoption (Janse et al., 2016; Lipschitz et al., 2017).

Collaborative Care Project
The Medical Psychiatry Alliance (MPA) - Trillium Health Partners (THP) Seniors Outpatient Community Collaborative Care Project was developed to create a model of integrated geriatric medicine and geriatric psychiatry collaborative care for seniors aged 65 and over with at least one chronic physical condition impacting function and co-occurring symptoms of depression or anxiety (Geist et al., 2020). The project was implemented as an outpatient service at THP, a large community teaching hospital (University of Toronto) in Mississauga, Ontario. The project underwent an evaluative study that was approved by the THP Research Ethics Board as reported in our publication describing the collaborative care model. (Shulman et al., 2021)

In our collaborative care model, care managers (CMs) who may either be a nurse, social worker, or occupational therapist, provided holistic care with initial and follow-up assessments based on treat to target rating scales. A central part of the care model is structured case reviews (SCR) where the CMs present cases to a geriatrician and geriatric psychiatrist. Recommendations from the SCR are communicated by the CMs to the primary care provider (PCP). The patient in this care model does not meet directly with the specialist physicians therefore a concise but holistic presentation of the patient during the case reviews becomes instrumental to the success of the program.

Structured Case Reviews (SCR)
Good communication is key to the success of collaborative care. SCRs are essential part of the collaboration in an integrated care team to foster effective communication. We realized that healthcare workers from different disciplines would benefit from a common means to discuss cases. One commonly used framework to ensure effective communication during patient care is the SBAR (situation, background, assessment, recommendations) where the presenter conveys the overall “story” of the patients using the structure from the SBAR (Shahid & Thomas, 2018). Although, the SBAR framework promotes collaboration through effective communication, it is not specifically designed to capture both mental and physical health problems as they present itself in older adults. Additionally, since the CM within a collaborative care model plays the central role in the care coordination and management it is often this role that performs the case presentation. However, CMs often lack formal training or education in traditional medical-model case presentation for which the order of issues presented can differ between mental health and physical health models. To overcome these challenges, we developed a new format for case presentation based on modifying the SBAR framework of communication using a novel clinical approach we named the 12 Ds of Geriatric Medical-Psychiatry.

Methods
The 12 Ds of Geriatric Medical-Psychiatry
The 12 Ds of Geriatric Medical-Psychiatry was developed by extrapolating on the concept of the SBAR, the 3 Ds (Arnold, 2004; Dharia et al., 2011; Edwards, 2003; Milsen et al., 2006) and 4 Ds (Insel & Badger, 2002) of geriatric psychiatry. Alternate approaches to conceptualizing the geriatric patient considered included the Geriatric 4 Ms (Molnar, 2016) and 5 Ms (Molnar et al., 2017).

The case presentation model including the 12 Ds as part of a case review is presented as follows:

1. **Situation**: includes referral source, reason for referral, and patient’s expectations.
2. **Background**: includes age, gender, language spoken, marital status, and living arrangements.
3. **Assessment**: described using the 12 Ds of Geriatric Medical-Psychiatry. The 12 Ds for case presentation are described in Table 1 and a schematic representation of the 12 Ds can be found in Figure 1.
4. **Recommendations**: for investigations, pharmacological and non-pharmacological treatment suggestions to patient and PCP.

We successfully used the 12 Ds model to present more than 180 patients and found the model easy to use and well received by learners and colleagues. All verbal and written reports to our referring PCPs utilized the 12 Ds case format presentation rather than the traditional format of case reporting and we did not receive one complaint or criticism.

Discussion
The 12 Ds of Geriatric Medical-Psychiatry appears to be an efficient means for case presentation and is particularly suitable for integrated collaborative care for seniors by interdisciplinary teams. In our experience, the 12 Ds of Geriatric Medical-Psychiatry can be applied to discussion of any geriatric patient, not only those with depression/anxiety and physical conditions.
The 12 Ds was also well received by medical students as a helpful clinical approach to developing a holistic understanding of the current healthcare issues facing any geriatric patient. We suggest the 12 Ds of Geriatric Medical-Psychiatry could be used as an efficient and effective means for presenting cases and teaching an integrated, holistic approach to understanding complex geriatric cases.

**Practice points**
- The 12 Ds of Geriatric Medical-Psychiatry within a modified SBAR framework provides a comprehensive, well

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### Table 1. 12 Ds of Geriatric Medical-Psychiatry.

| 1. | Dementia or any cognitive changes | Cognitive screening such as with the MoCA (Nasreddine et al., 2005) or RUDAS (Storey, et al., 2004) would be reported and any subjective and/or informant description of a decline in cognition or function. |
| 2. | Depression/anxiety-demoralization | Mood and anxiety screening such as with the PHQ-9 (Kroenke & Spitzer, 2002) and GAD-7 (Spitzer et al., 2006) would be reported and screening for suicide risk assessment with the C-SSRS (Posner et al., 2011). Report any subjective and/or informant description of mood and anxiety symptoms. Determine if symptoms correspond to early-life recurrent depression or late-life onset depression which commonly correlates with a depression-executive dysfunction syndrome (Alexopoulos, 2005). Report the mental status examination findings regarding affect, mood and thought content. Be aware those without major depressive disorder but with chronic physical illness may nonetheless suffer demoralization and tiredness of life leading to desire for death (van Wijngaarden et al., 2014). |
| 3. | Delirium (subsyndromal) | Report any concerns about possible cognitive disruption consistent with subsyndromal delirium (Cole et al., 2003) from reversible factors. If warranted, assess patient using the CAM (Inouye et al., 1990) or via caregiver interview using the Sour Seven Delirium Detection Questionnaire for Caregivers (Shulman et al., 2016). |
| 4. | Disabling medical illness | Report the medical history resulting in physical limitation in activities of daily living (ADLs) and/or restriction in participation in social activities. Describe any enduring physical condition that reduces the individual’s well-being. |
| 5. | Drugs-including drinking (alcohol) & dope (cannabis) | Report prescriptions, over the counter and homeopathic products, and any substance use and allergies. Report previously trialed and/or discontinued psychotropics including the duration of treatment and reasons for discontinuation. Focus on inappropriately prescribed medications for seniors utilizing the Updated Beers Criteria for use of medications in older adults (American Geriatrics Society, 2015). |
| 6. | Disconnection/disengagement (social health) | Report patient’s social support network. Social risk factors for depression and anxiety symptoms include social isolation, lack of social support systems, destitution, lower socioeconomic status, and limited access to a healthy diet, medications and/or transportation (Egbert, 1996). |
| 7. | Delusions | As described in the DSM-5 (Schizophrenia Spectrum and Other Psychotic Disorders) (American Psychiatric Association, 2013) delusions are fixed beliefs that are not amenable to change in light of conflicting evidence. |
| 8. | Decision-making capacity | The patient’s ability to consent to healthcare decisions is discussed. Document if a Power of Attorney for Personal Care has been completed or alternatively who is the substitute decision maker (SDM). |
| 9. | Discharge planning | The plan of care includes planning for appropriate disposition and referral if needed. |
| 10. | Deconditioning | Functional screening such as with the WHODAS 2.0 (Garin et al., 2010) is reported or alternatively describe any decline or improvement in function as needed. |
| 11. | Driving | Due to mandatory reporting laws in many jurisdictions such as in Ontario, we suggest any geriatrics assessment requires consideration if a condition exists that may impair driving. |
| 12. | Death | Suicide risk is covered in depression/anxiety-demoralization. Death here refers to dealing with mortality issues in the self or others. |
organized, and holistic format to discuss the pertinent issues facing geriatric patients.

- The 12 Ds of Geriatric Medical-Psychiatry appears to be an efficient means for case presentation and is particularly suitable for integrated collaborative care for seniors by inter-disciplinary teams.

- In our experience, the 12 Ds was well received by learners as a helpful clinical approach to developing a holistic understanding of the current healthcare issues facing any geriatric patient.

**Author contributions**

We confirm that all authors made a significant contribution to the work and the manuscript according to common authorship guidelines.

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