UNIT NO. 2

AN APPROACH TO CARING FOR PATIENTS WITH COMPLEX CO-MORBIDITIES FOR FAMILY PHYSICIANS: THE SBAR4 MODEL FOR COMPLEX CO-MORBIDITIES

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ABSTRACT

Providing comprehensive and continuing care to patients is the forte of family physicians. The burden of providing such care to patients with complicated co-morbidities is increasing rapidly in ageing populations. Primary care systems around the world are ill equipped to face such a challenge. Family physicians need to hone their skills in this area of care. We propose the use of the SBAR4 model as a framework for managing complex co-morbidities. This model is easy to learn and use by family physicians as it is based on the familiar SBAR model of clinical communication and Pendelton's 7 Tasks of consultation. We believe that the SBAR4 will assist the clinician to assess patients with complex co-morbidities and map out a comprehensive care plan that can be easily understood by a multidisciplinary team caring for such patients.

Keywords: Co-morbidities; Complex Care; SBAR; Aging;

SFP2016; 42(4): 14-18

INTRODUCTION

Ageing of the population is associated with increased prevalence of chronic diseases and co-morbidities. It has been estimated that 80 percent of the elderly have 3 or more chronic diseases.[1] This in turn is associated with increases in mortality, utilisation of healthcare resources and the cost of care.[2] At a time when healthcare systems are struggling with rising demand and diminishing resources, this phenomenon raises serious concerns in countries with rapidly ageing populations. Concerted efforts are being made to improve system efficiency. Various care integration and care transition programmes targeting elderly with high risk of hospital utilisation had been started in healthcare systems around the world. Much investment had been made to fund such pilots and programmes although evidence of their effectiveness remains inconclusive.

A major contributing factor to this difficulty is the way healthcare systems are organised and the way clinicians are trained to do their work. In the past decades, health systems coped with the complexity of healthcare by using the reductionist approach and the specialisation of tasks.

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Healthcare was compartmentalised into departments using the assembly-line paradigm. Clinicians were trained to be interchangeable specialists in different silos along the line of care. The "patient journey" was tracked to ensure rapid movement along the production line to optimise efficiency and lower cost. The care is often decontextualised in the process of reduction and compartmentalisation. The psychosocial components and the unique individuality of patients were often lost in the standardisation process. Besides being fragmented, the solution offered was often depersonalised and ignored social and psychological needs. Such a paradigm was highly effective when health problems were discrete and predominantly biomedical in nature. The advent of the age of multi-morbidity and the rising numbers of patients who require complex care throws the present healthcare systems into disarray and new solutions are being sought earnestly.[3]

The counter culture of this dominant trend emerged in the form of family medicine and generalism. Generalism accepts complexity and manages problems by seeking to understand context and interdependency of agents in the system. For the generalists, the method of managing complexity by reducing problems into parts that are less than the sum does not make sense. Instead, family physicians embrace systems thinking and see the patient's health issues as a subsystem within a larger system of the family and the community. The care of the patient must also take place within the context of a larger health and social care system. The recent calls for greater patient centredness, better care integration, and care transition are all part of the same movement to restore equilibrium to the system. The rising tide of complex co-morbidities is straining the healthcare systems to breaking point. It validates the call to return to generalism as a counterweight to specialisation. Once again, as it was in the late' 60s, family physicians are being called to restore the fragmented healthcare system and re-contextualise care to the person and the community. The burden of managing patients with co-morbidities falls upon the family physician. It is the discipline whose raison d'etre is to provide comprehensive and continuing care in the context of the person and the environment. This gives family medicine its unique identity in the midst of all the specialties and its critical role in the healthcare system.[4]

DEFINING COMPLEXITY

Managing patients with multiple co-existing health issues is complicated, the care needed is complex, and the patients are often frail. Multiple terms that refer to the same construct are often used interchangeably, which further complicates the complicated. A better understanding of these terms is helpful in clinical care.[5]

Morbidity

Morbidity means the presence of ill-health and may be narrowed down to the state of having a disease.

Co-morbidity

Co-morbidity is harder to define. The recognition of the significance of co-morbidity and the need to better understand it came as early as 1970.[6] It is generally taken to mean the co-occurrence of diseases in an individual. In earlier usage there was less interest in relatedness, that is, the state of co-morbidity is seen as the chance occurrence of more than one disease within the same person. It was also focused on understanding the index disease in the context of the other diseases. Over time, our understanding of the interdependence of things and the nature of ill health increased. The concept was expanded from co-occurrence to include co-variation.[7] The term is presently used to describe co-occurrence of diseases that are both related and unrelated, with the focus on their impact on the person. In addition, the chronology of their occurrence is taken into consideration.

The understanding of "morbidity" was also expanded to include risk factors and psychosocial factors that affect physical health. For clinicians, co-morbidity may be better defined as a state of ill-health caused by the co-occurrence of inter-related diseases, risk factors, and psychosocial determinants of ill-health.

Multi-morbidity

The term multi-morbidity is easier to define as it excludes the relationship between the morbidities. This simplifies the terminology and makes it easier to manage in research, especially in the field of public health and health services research. The trade-off is that it disengages from their interdependence and complexity. While it is a less effective paradigm for patient management, it facilitates data collection and analysis in quantitative research. Therefore, multi-morbidity has been defined simply as the coexistence of 2 or more chronic diseases or medical conditions in the same individual.[8]

COMPLEX PATIENTS AND COMPLEX CARE

Complex care is the care needed by complex patients. Complex patients have been defined as patients with 2 or more chronic diseases where each condition may affect the care of the other conditions. This is further qualified by the need to take into consideration other factors such as age, race, gender, and psychosocial issues that influence the disease.[9,10]

Complex co-morbidities

For the purpose of managing patients with many diseases that interact in complicated and often unpredictable ways, it may be more helpful to adopt a different paradigm of understanding that facilitates clinical care. The coexistence of multiple chronic diseases does not necessarily indicate complexity. In fact, many patients with multi-morbidities are stable and require uncomplicated and almost routine care. On the other hand, there are those with chronic diseases that had spawned multiple complications of their own, often resulting in multiple organ failures that are mutually exacerbating. A more effective understanding of the many diseases occurring in the same person is needed for such a scenario. Complex co-morbidities may be a better paradigm and may be defined as the existence of co-morbidities that are interdependent in their manifestation and response to treatment.

The management of patients with complex co-morbidities requires us to understand diseases using new care models and tools that are integrative, and to provide a roadmap for developing treatment strategies.[11] An effective way is to combine and re-fashion existing models and tools. Two of the most effective models for clinical analysis and integration are the SBAR and Pendleton's 7 tasks of consultation.

SBAR

The process of clinical decision-making in managing complex co-morbidities is very similar to the basic processes of clinical decision-making. The first phase involves identifying the decisions that must be made in the context of caring for a patient with complex co-morbidities. A clinician may encounter such a patient in the acute phase during life-threatening exacerbation of one of the morbidities. Another situation may be at the end of a hospital stay and the clinician has to make clinical decisions in planning for discharge or transition to another setting of care. The most common encounter for a family physician would be when the patient is received in the consultation room after a stormy period of hospitalisation. The decisions required will vary depending on the context of the encounter. The second phase involves understanding the co-morbidities and their interdependency. At this point, the clinician has to search and discover all the morbidities, risk factors, and psychosocial determinants of health. The process must be exhaustive. An undiscovered morbidity or psychosocial determinant may blindside the clinician and render the entire care plan ineffective. The third phase involves understanding the interdependency of the co-morbidities and their likely impact on different plans of action. The clinician must analyse and weigh the various options in the context of the co-morbidities. The fourth phase involves taking action to intervene and effect a better outcome for the patient. It requires clear communication to self, the patient, and other stakeholders involved in the care of the patient.

These 4 steps are very similar to the SBAR communication model that has been well described. The SBAR model for communication was developed in 2002 to facilitate interdisciplinary communication and to overcome the barriers caused by care fragmentation and the hierarchical organisation in healthcare.[12] Since its introduction it has been widely adopted by various institutions in a bid to improve patient outcome especially in situations where there are multiple stakeholders caring for the same patient, when there are co-morbidities, and where clear communications are critical. It is also widely recognised to be highly relevant in situations requiring handover of care and in the transitioning of care for complex patients.

The four elements of SBAR are:
Situation: What is going on and why the clinician is needed?
Background: What are the patient's co-morbidities and how are they relevant to the situation?
Assessment: What is the patient's present clinical status and what are the problems that need to be resolved?
Recommendation: What are the actions or interventions that need to be implemented?

The SBAR therefore can be used as an initiating framework for managing complex co-morbidities but it requires augmentation to make it more effective.

CONSULTATION THEORY: PENDLETON'S 7 TASKS

Family physicians were the first clinicians to recognise the importance of the consultation process. It is considered to be the central act of medicine and an important transaction between patient and the doctor which is beyond the simple processes of history taking and physical examination. A well-conducted consultation not only clarifies the patient's health status and the tasks at hand, it also creates a therapeutic relationship which is so crucial to optimising the outcome of a patient encounter. There are various perspectives on the consultation process and many models had been proposed. Among these models, Pendleton's 7 Tasks is probably the most comprehensive and effective model for managing complex co-morbidities. In 1984, a sociologist named David Pendleton did extensive analyses of consultations carried out by general practitioners. From these observations, he distilled 7 tasks that need to be done in order to achieve a good outcome during a consultation.[13]

The 7 tasks that should be achieved during a consultation are:
1. Define the reason for encounter, including the understanding of the ideas, concerns, and expectations of the patients.
2. Consider other problems besides the reason for encounter which includes other unresolved problems as well as risk factors of ill health.
3. Choose appropriate action with the patient for each problem.
4. Seek shared understanding for each of the problems identified.
5. Involve and encourage the patient to take appropriate responsibility in the management plan.
6. Use time and resources appropriately.
7. Establish and maintain a relationship with the patient to facilitate the achievement of the other tasks.

There are similarities between the SBAR model and the Pendleton model, especially in the first 4 tasks. The integration of both models provides us with a new and comprehensive model that is ideal for understanding and managing complex co-morbidities.

THE SBAR4 MODEL FOR COMPLEX CO-MORBIDITIES

The SBAR4 Model is an integration of the SBAR and Pendleton model. It provides a useful framework for understanding and managing patients' complex co-morbidities that is especially relevant for family physicians. The 7 components of the SBAR4 are essentially a re-contextualisation of the Pendleton model for the purpose of caring for patients with complex co-morbidities. The 7 components are:

1. **Situation** that resulted in the encounter and the expectations.
2. **Background** of existing co-morbidities and their interdependency.
3. **Assessment** of co-morbidities and the shared understanding among stakeholders for each of the morbidities.
4. **Recommendation** of an action plan for each co-morbidity for the patient and stakeholders.
5. **Resource**, both medical and social, are mustered to support the patient.
6. **Responsibilities** of the patient, stakeholders, and care providers, and how they can be activated.
7. **Relationship** with patient, caregivers, team members, and service providers, are sustained to facilitate optimising care.

The SBAR4 framework provides a structure for reconstituting fragmented information and restores context to the inter-related problems. It also helps to clarify the tasks at hand.

CONCLUSION

The number of patients with complex co-morbidities is rising rapidly with the ageing population and the increasing prevalence of chronic diseases. The hospital-centric model of the healthcare systems in developed countries are unable to cope with this new phenomenon. Family medicine had always advocated for adopting a comprehensive and integrative approach to managing all health in the context of the individual. It is the most appropriate specialty to manage complex co-morbidities.[14] Unfortunately, healthcare systems have for the longest time sought to manage complexity by specialisation and neglected the need for an integrative approach.[15] Times have changed. Family physicians and primary care are now seen as the sustainable solution that will enable health systems to cope with the unprecedented demand for healthcare resources, driven by the rise of complex co-morbidities. Family physicians have the requisite training and care paradigm. Principles for providing complex care for such patients have been proposed.[16] While these are helpful, they are often conceptual and not specific enough to meet the needs of family physicians grappling with the complexities of the tasks at hand. We need the tools to bring our training to bear on this problem and the SBAR4 model is proposed as such a tool for family physicians.

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LEARNING POINTS

- **Complex co-morbidity is the co-existence of 2 or more disease that are interdependent in their manifestation and response to treatment**
- **The SBAR4 is a combination of SBAR and Pendleton's 7 tasks of consultation. It can be used as a tool for managing patients with complex co-morbidities**
- **Family physicians who are trained to be experts in providing comprehensive and continuing care are well positioned to manage patients with complex Co-morbidities.**

Annex A: SBAR4 Complex Care Framework

SBAR4 Complex Care Framework		
S	**Situation** Reason for encounter and decisions needed	1. What were the circumstances that lead to this encounter? 2. What are the decisions that must be made during this encounter?
B	**Background** Co-morbidities and their interdependency	1. What is co-morbidities in this patient? 2. What are all the other biopsychosocial issues that affect the health of this patient?
A	**Assessment** Shared Understanding of the Co-morbidities	1. What is the present clinical state of the patient? 2. What are your team's understanding, and the patient's understanding of all the issues listed in B?
R	**Recommendation** Shared Understanding of each Action Plan	1. What is the best course of action to take for each of the issues listed in B? 2. How can you make the patient understand the reasons for each of these action plans?
R	**Resource** Mustering of medical and social care services	1. What are the health and social services that can be activated to help your patient? 2. How are you going to bring them on board?
R	**Responsibility** Activation of all stakeholders including patient	1. How can you convince the patient to take the best course of action to help himself? 2. What are the roles and responsibilities of the different team members and service providers?
R	**Relationship** Maintaining working relationship with patients and stakeholders	1. How are you going to co-ordinate and work with all your team members and service providers? 2. How are you going to establish an on-going therapeutic relationship with the patient and their caregivers?