ABSTRACT

Self-care is generally regarded as an essential component of healthcare. Yet, its implementation and performance can be uneven, with gaps in the critical processes and behaviors of self-care that may detract from both individual and population-based healthcare. This commentary considers this premise, noting particularly the evolving definition of self-care and its recognized multidimensionality, and using an example of self-medication taking behavior to explore how a systems approach can highlight gaps in self-care.

Key words: independent self-care, supported self-care, systems approach, self-care behaviour, medication-taking.

WHAT DO WE MEAN BY A ‘SYSTEMS APPROACH’?

According the U.S. Institute of Medicine (IOM, July 2013), a systems approach to healthcare delivery is one that grasps how elements of care operate individually and in assembly with each other. Specifically, IOM concluded:

“A systems approach improves health by considering the multiple elements involved in caring for patients and the multiple factors influencing health. By understanding how these elements operate independently, as well as how they depend on one another, a systems approach can help with the design and integration of people, processes, policies, and organizations to promote better health at lower cost. These approaches can be useful for all levels of the health system – patient-clinician interaction, healthcare unit, organization, community, and nation – with different tools available for the needs at different levels and across levels.”

IOM’s position paper focuses mainly on the high cost components of healthcare. IOM calls for urgent change through a systems-approach to improve healthcare outcomes at lower cost. Further, IOM concluded that US healthcare ‘performs below its potential in several dimensions, with uneven patient safety, escalating costs and stagnant productivity, and inconsistent use of scientific evidence’. As to solutions, IOM recognized the importance of centering the initiatives on patients and the public:

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… the goal of any improvement initiatives should be centered on the individual served – whether it is a person in the community, a patient, or a consumer – and improving his or her health and care experience. Moreover, individuals play critical roles in managing their health outside of clinical encounters, from managing complex treatment regimens to everyday decisions on nutrition and exercise. Finally, individual patients and the public can be vital partners in implementing systems tools and techniques by highlighting how these tools work on the ground and providing feedback on whether these tools improve their care experience or aid their health maintenance.

Therefore, despite being silent on self-care per se, the IOM report highlights areas and roles of direct relevance for those interested in self-care across the spectrum of healthcare. It is a logical offshoot of the IOM treatise that we should use a systems perspective to examine both independent self-care (i.e., self-care by an individual with no other health service involvement) and supported self-care (e.g., that provided by clinicians helping patients create action plans for self-care between office visits). Such considerations are important, for example, as a basis for addressing gaps in patient counseling and medication education. From an understanding of these gaps, solutions might be found that can both protect and promote public health. An understanding of how systems interact might inform novel drug safety initiatives and improve the evidence for expanding self-care with new nonprescription medicines through Rx-to-OTC switch.

SELF-CARE, A MULTIDIMENSIONAL COMPONENT OF THE HEALTH CARE SYSTEM

Self-care is now recognized to encompass a broad set of concurrent personal choices and actions, and is applied in healthcare across a spectrum of decision-making settings depending on an individual’s specific needs. Because self-care spans most of the spectrum of healthcare, definitions of self-care vary, mainly depending on its setting and stakeholders’ perspectives. More recently, there is an emerging trend to focus on the behavioral aspects of the system of self-care across all settings.

A universally accepted definition of self-care does not exist, and different definitions have been offered by government, industry and practitioners. For example, this is evident in the evolution of the initially broad definition of self-care given by the UK National Health Service, into its current use of the term which varies with the setting. Thus in the context of chronic diseases, NHS has defined self-care as ‘…a part of daily living to maintain health and well-being for people with long-term conditions. .[which] includes the actions taken to minimize the impact these conditions have on their everyday lives’. In other contexts, the NHS uses ‘self-care’ to describe activities across the spectrum available to the free-lance consumer and patient, including general health maintenance (daily brushing of teeth, exercise, lifestyle choices such as moderation of alcohol intake), special dietary changes, medications for managing long-term disease risk and social activities. But all in the context of having a healthcare team for determining the need for, and delivery of, suitable support for an individual’s specific needs. Yet more recently, NHS uses a narrower definition in relation to the function of its call centers, describing self-care as independent management of symptoms at home with no involvement of any other service (including exclusion of a referral)
based solely on advice given the caller by telephone. More accurately, this latter definition should be defined as ‘independent self-care’.

Over forty years ago in the U.S., the Proprietary Association (subsequently renamed, the Consumer Healthcare Products Association) originally applied the term self-care very narrowly to only nonprescription medicine use by consumers. A conceptual line of demarcation was drawn by the OTC industry to separate an individual’s role in healthcare as either consumer or patient. In part this was to: (a) help support a two class system of medicines in the U.S. (prescription – Rx and OTC) and thwart introduction of a pharmacy-only class of drugs; and (b) build credibility for OTC drug companies in regulatory and legislative settings. Among policy changes in the U.S. and U.K. that overcame this narrow positioning of self-care were the advocacy of patient-centered care in the Chasm Series of policy papers by the U.S. Institute of Medicine, and the need to empower U.K. citizens to engage in independent self-care outside of over-burdened GP and ER settings. The U.K has maintained self-care as a high visibility policy priority, which is not paralleled by the U.S. Health and Human Services. Nonetheless, the policy trajectories of both IOM and NHS have been targeted at restructuring medicine and its delivery from a vertical physician-driven command paradigm, to a horizontal patient-centered decision-choice paradigm within a health team. Independent and supported self-care are concepts that fit this restructuring nicely.

Concurrent with these developments, the field of psychology generated grounded theories of health communication and the practice of motivational interviewing (MI) to enable patient behavioral change. MI refers to a counseling approach that recognizes the point of readiness (when a patient or consumer recognizes and accepts the need to change) as a critical juncture to achieving that intended change. This approach enables the change by applying specific counseling techniques that allow individuals to see and acknowledge discrepancies in their own behavior as a basis for the creation of workable action plans by the patient with the practitioner. Again, self-care is easily integrated into this framework for creating behavioral change in the long intervals between medical visits by patients.

Thus, it is not surprising that practitioners tend to consider self-care more as a behavioral phenomenon to be modified through practitioner support, and typically not fulfilled without that professional support. As noted by Chambers et al.: ‘Self-care is about people’s attitudes and lifestyle, as well as what they can do to take care of themselves when they have a health problem. Supporting self-care is about increasing people’s confidence and self-esteem, enabling them to take decisions about the sensible care of their health and avoiding triggering health problems. Although many people are already practicing self-care to some extent, there is a great deal more that they can do.’

On the one hand, it is encouraging that government, industry, and practitioners tailor definitions of self-care to their own perspective. It speaks to the universality of self-care across most of the spectrum of healthcare. On the other hand, it suggests an approach that may be at considerable risk of missing important interrelationships among component parts of the healthcare system.
CRITICAL GAPS IN SELF-CARE: MEDICATION-TAKING BEHAVIOR AS AN EXAMPLE

To illustrate the relevance of a systems approach to self-care, let us examine where this would lead us when considering the behavior of people who have been prescribed medication.

A systems approach to the self-care aspects of medication-taking behavior is probably best undertaken from both a psychological platform that addresses personal attributes (such as confidence, self-esteem, and personality type), and a capacity platform including considerations of mental capacity, health literacy, language and socio-economic status.

As an example of the complexity this may involve, let us consider diabetes, a leading cause of morbidity and mortality in our society. In a retrospective look at 22,694 patients with diabetes seen during 50,142 documented visits, patients used an average of 15 prescription medications to treat six different medical conditions. Over 50% had hypertension and hyperlipidemia as comorbidities. Practitioners agree that patients with diabetes are often complex to treat due to the simultaneous application of multiple ‘standard of care’ guidelines for multiple medical conditions, which can be at best confusing or even conflicting. Evaluating outcomes is also complex requiring comprehensive documentation of conditions, medications (Rx and OTCs), dietary supplements, laboratory values and changes in signs and symptoms over time. Also important is an assessment of personality, changes in motivation over time, and other factors (e.g., stress inducers, aging, emergent side effects, and changing severity of clinical symptoms).

Case Example: LT is a 55-year-old moderately affluent woman with diabetes who has persistently high A1c measures of blood sugar control, occasional migraine headaches, osteoporosis, recent hip replacement and gingivitis. Three years ago she had a mild heart attack. Her relatively mild hypertension and modestly elevated lipids appear to be controlled by medical therapy.

Since her hip replacement, LT has used her recumbent bicycle and a modest upper body strength-building program for cardiovascular training and toning respectively. She has lost 35 pounds in the last 6 months, with a dramatic drop in her A1c to 7.6% from 8.5% and a modest drop of her LDL to 113 with a continued above average HDL.

As an expression of interest in her own self-care, LT has organized her own self-care oriented infrastructure that includes a responsive and cheerful health team comprised of a family practitioner, an endocrinologist, a neurologist, a nurse who is a certified diabetes educator, a physical therapist, a dentist, pharmacists at her local pharmacy for both Rx dispensing/counseling and OTC self-selection medicines, a nutritionist in a members-only nationally syndicated diet plan, and a website that hosts a medical health application for tracking her diabetes care, at a monthly membership fee not covered by her health plan.

LT has what she thinks is a reasonably sophisticated approach to obtaining knowledge and skills associated with her own self-care. She has accumulated what knowledge she could through practitioner counseling, patient blogs, credible web-based drug information, television and magazines. With this infrastructure, LT feels she has been able to obtain and decide on options for her own self-care, act independently as needed, and when in doubt access supported self-care from her health professionals or secondary and tertiary care for serious emergent conditions.
As well-supported as LT may seem to be, she judges her satisfaction with the health services she accesses based on perceived value relating to e.g. congeniality of the staff, understandability of the information conveyed, scheduling reminders, and how she feels she is progressing. Her excellent progress may have much more to do with her personal attributes and resources (both intellectual and monetary) than with the support she is receiving from her healthcare ‘system’. It is likely she does not grasp that her health team is not fully integrated across her practitioner base, e.g. not accessing her online diabetes tracker even at scheduled visits. Her professional network may not be routinely sharing information about her medications for diabetes, hypertension, elevated lipids and analgesics, as expected by the Food and Drug Administration (FDA).

On this latter point, FDA has for some time issued Full Prescribing Information in an improved easier-to-use format, which includes among other things Section XVII on patient counseling. This section contains the essential drug information for the patient. It is written in the grammatical imperative (i.e., ‘the patient shall be informed that…’), indicating FDA’s intention to promote its regular use of Section XVII in counseling, though the agency has no way to enforce this. From informal discussion with practitioners at a leading University, many practitioners are unfamiliar with Section XVII and use other information sources for counseling patients. This appears to be a serious disconnect within the sub-system of self-care.

LT’s case illustrates that outcomes in the management of long term conditions may depend as much or more on the personal attributes of the individual than the quality of the health services they access. Even in this case, where conditions to encourage self-care are optimal, there are still missed opportunities to share information between professionals and improve communication to the patient. It takes little imagination to speculate on the likely outcome if LT was an individual challenged by low motivation, or lacking in health literacy and/or socio-economic resources. In these circumstances the integration of the health systems which are accessed, and the quality of the information they can provide to individuals to support self-care become absolutely critical.

A recent publication of available literature combined with original research on the aspect of use of drug information in self-care highlights how a systems approach can help describe the individual components of medication-taking behavior (i.e., therapeutics of self-care), even though studies to date do not describe interrelationship of these components in their actual practice. The publications showed a pervasive medication education gap in the delivery of healthcare and in self-care, as evidenced by the following observations: (a) only about 60% of essential drug information is conveyed during medical visits; (b) when drug counseling is done in the office visit, most physicians report spending about a minute and a half on it with the patient; (c) almost 70% of patients picking-up prescriptions in pharmacies do not receive counseling by pharmacists; (d) 50% of people who received a prescription in the last 6 months report reading or keeping the retail drug monograph provided in, or attached to, the dispensing bag; (d) a minority of adults report consulting the OTC Drug Facts Label for active ingredients (44%), side effects (20%), or dosage instructions (34%), and 8% percent do not consult the label at all. In the article summarizing these results, Soller and Shaheen concluded:
The concept that consumers read, understand and use oral and written medication information is fundamental to the U.S. government’s mission, the growth of self-care through responsible self-medication, and ultimately the containment of healthcare costs through better medication safety. However, the results drawn from our five labeling comprehension studies are consistent with published findings on gaps in EMI communications between health professionals and patients and to consumers, and thus add to a concern about the potential magnitude and implications of this gap in the United States and other countries. Our results show substantial numbers of patients and consumers are not reading, or keeping for reference during use, essential medication education provided at community pharmacies in the form of RDMs and OTC medication labels.

As noted, the IOM recognizes a systems approach would bring rigor to optimizing the interrelationship of the behavior of components of the healthcare system. Given the magnitude of the medication education gap, at least as currently described by available literature, a better understanding of how these elements operate independently and where cross-bridges define interdependence, seems essential in order to design ways to integrate people, processes, policies, and organizations to promote responsible self-care for better outcomes.

CONCLUSION

Applying a systems approach to self-care would entail a comprehensive identification of its component parts, descriptions of how they operate independently and interdependently, assessment of the realistic capabilities and capacities of the component parts, and testing the system in actual practice. In so doing, the term ‘responsible self-care’ can itself be defined as a complex of optimal outcomes of the system, and the relative weight of the factors that create negative and positive pull on these outcomes can be evaluated in order to create solutions for behavioral improvement in the system. This approach of continuous quality improvement of the system of self-care fits the government’s objective of protecting and promoting the public health, and would greatly improve the understanding of medication taking behavior by patients. A better understanding of these interactions and behaviors may also enable more complex Rx-to-OTC switches to be considered for introduction to the nonprescription drug market.

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REFERENCES


