SOCIAL RESEARCH REPORTS

ISSN: 2066-6861 (print), ISSN: 2067-5941 (electronic)

**PATIENT-CENTERED CARE WITH SHARED DECISION-
MAKING: PHYSICIAN-PATIENT RELATIONSHIP:
COMPARATIVE ANALYSIS**

Olga LIPOVETSKI, Daniela COJOCARU

Social Research Reports, 2019, Vol. 11, Issue 3, pp. 18-34

The online version of this article can be found at:
www.researchreports.ro

<https://doi.org/10.33788/srr11.3.2>

Published by:
Expert Projects Publishing House

Covered by Index Copernicus International
www.indexcopernicus.com

Directory of Open Access Journals
www.doaj.org

On behalf of:
Center for Program and Social Development

Additional services and information about Social Research Reports
can be found at:
www.researchreports.ro

PATIENT-CENTERED CARE WITH SHARED DECISION-MAKING: PHYSICIAN-PATIENT RELATIONSHIP: COMPARATIVE ANALYSIS

Olga LIPOVETSKI¹, Daniela COJOCARU²

Abstract

The physician-patient interaction and relationship is the core element of the health-care system, which is developing towards greater patient's involvement in required medical decisions, regarding patient's medical condition. Sharing physicians-patient decisions issue is deepening on the medical discourse. It includes a sociological essence, which is considered in the current article, which tends to compare physician-patient relationship in Israel and worldwide. The current article presents a literary Review of academic articles, mainly from the past decade, inquiring searching databases, such as NCBI, Elsevier, JAMA and Research Gate, using keywords of Patient-Centered Care, professionalism, and human and sociological approaches of patients' medical care. Among dozens of found articles, 40 were assessed and selected for the review. Although, a recognition of the importance of using SDM and CCM can be found within healthcare teams, hardly no use of the models is actually in practice in healthcare systems in Israel. The CCM and the SDM models should be implied in Israel for the best of patients, physician and the healthcare system.

Keywords: Patient-Centered Care, professionalism, human and sociological approaches of patients' medical care.

Introduction

In recent decades, the world population is ageing and experiences multiple complex diseases, many of them chronic. To effectively deal with chronic disorders and provide suitable treatment, improvement measures and controlled clinical trials are been developed. According to the 2008 World Health Organization (WHO) report, 25% of 65–69 year olds and 50% of 80–84 year olds are affected by two or more chronic health conditions. The multiple chronic conditions (MCC) is studied

¹ Ramat-Gan Academic College, Department of Nursing, ISRAEL; Alexandru Iona Cuza University from Iasi, Department of Sociology and Social Work, Iasi, ROMANIA. E-mail: olga.l@iac.ac.il

² Alexandru Iona Cuza University from Iasi, Department of Sociology and Social Work, Iasi, ROMANIA. E-mail: dananacu@gmail.com

across the world. It increases along with population's aging and at an earlier age, in deprived populations. MCC's implications are myriad and depend on societal perspectives, the healthcare system and individuals' behavior (National Quality Forum, 2012). Individual patients with MCC are often cared in a fragmented way and are split between providers. This is leading to inefficient, incomplete and ineffective care, which puts them at risk, causes avoidable hospital admissions, different medications taking, carrying risk of interactions or adverse events and mortality, as treatments for one disease could be contradictory to others (Arbelle, Chodick, Goldstein & Porath, 2014).

The medical profession tends to place patient welfare ahead, as part of the Charter on Medical Professionalism (*ABIM Foundation*), in order to maintain patient trust and benefit. According to the Charter, physicians are committed to honesty with patients and to ensure that patients are completely informed prior to consent to treatment and after treatment's occurrence. Patients are not expected to be involved in every decision of the medical care, however, they have to be empowered to decide on the course of therapy, and care should be customized to individual patients. The focus on patient-centered care, shared decision-making among patients in chronic conditions, is the main interest in patient-centered approach, increasing along the recent decades in medicine and health sciences, focusing on patients' individual and understanding his personal needs and feelings. In patient-centered care, healing processes are based on openness for sharing, enabling patients being part of the treatment and the healing process, instead of referring to them as irrational and vulnerable, who are unable to be part of the medical process (Swensen *et al.*, 2010; Lesser *et al.*, 2010).

A patient-centered care (PCC) focuses on interventions, is aimed to restore the patient to health by empowering him and approaching him as a self-managing individual, capable to capture the complexity of his medical situation and take responsibility for the required medical treatment. This approach reveals an inner conflict, as the patient is given responsibility, on one hand, and has no professional medical knowledge, on the other. However, patient-centered approaches emphasize the ideal of the self-managing individual. Patients are empowered through the PCC model as they contribute to their own health decisions. The model highlights physicians' attentiveness to the singular patient's illness and personal case, and to particular patient's interests and values. The treatment is shaped in the interaction between caregiver and patient (Ahlsen, Engebretsen, Nicholls & Mengshoel, 2019).

Patient's Perspectives towards involvement in decision-making

The scientific literature refers to predictors of patients' role in decision-making, claiming that patients' level of willingness to participate in the decision-making process could be influenced by socio-demographic factors, health/disease-related factors and personal characteristics (Nota *et al.*, 2014).

PCC is a major dimension of healthcare and represents basic needs and values of patients throughout healthcare decisions. PCC represents a central approach, aimed to improve by health providers' efficiencies, encouraging patients to become partners to a certain extent with the design and delivery of medical care. PCC models are linked to positive patient experiences, to outcomes' improving and patients' adherence increase to treatment. The PCC approach is found beneficiary to patients and to healthcare organizations by reducing costs through decreasing hospital length stays and re-admission rates, leading to care settings' effective implementation (Santana *et al.*, 2019).

Patient's preferences for information sharing regarding treatments, involves taking responsibility for treatment decisions and playing an active role in decision-making processes, which does not suit every patient. Previous studies related to patients' preferences show high variability. Some of the patients preferred an active role in decision-making process, supplying them a sense of control of their medical situation (Nota *et al.*, 2014).

Légaré & Witteman (2013) indicated that a key factor, affecting satisfaction level, is how well the preferred involvement has been met by actual involvement. Légaré & Thompson-Leduc (2014) suggested that increasing patient satisfaction depends on healthcare professionals and the assessment of individual patients' preferences, providing healthcare services accordingly. The role of patients in decision-making process usually depends on patients' characteristics and their clinical situation. Inter-personal behavior findings from studies suggest that substantial number of patients (26–95%) were dissatisfied with the given information, and preferred participating in decisions making regarding their health. 71% of the respondents preferred sharing decision regarding their healthcare (Légaré & Thompson-Leduc, 2014).

The medical environment should enable patients to express their preferences (Légaré, & Witteman, 2013). A post-treatment survey of Friesen-Storms *et al.*, (2015) found that only 42% of patients achieved their preferred level of control in decision-making, and approximately 15% felt they were pushed to assume a more decisional role than they wanted.

A research executed in the Netherlands by Santema *et al.* (2016), revealed that 58% of the patients preferred a shared role in decision-making. 55% of the patients expressed disagreement with their previous medical experiences (Santema *et al.*, 2016). Similarly, in a study conducted in Malaysia by Mah, Muthupalaniappen & Chonga (2016), examining role preferences and involvement of patients in treatment decision-making, 51.4% of respondents preferred a collaborative shared decision-making (SDM) with their physicians, 44.8% preferred a passive role, and only 1.9% preferred an active role. These findings contrast results from a study of Ernst (2010) in Germany, in which 60.2% of the patients with hematological disease preferred a passive role, leaving their medical decisions to physicians.

A key factor affecting patients' satisfaction level of their medical treatment refers to how well the preferred involvement meets the actual involvement. Légaré & Witteman (2013) suggest that the increase of patients' satisfaction depends on healthcare professional assessment of individual patient preferences first, and the provision of healthcare services accordingly. The medical environment should facilitate patients' expressing of their preferences. A post-treatment survey, made

by Friesen-Storms *et al.* (2015) found that only 42% of patients believed they had achieved their preferred level of control in decision-making, and approximately 15% believed they had been pushed to assume a more decisional role than they wanted.

Medical Professionalism in patient-centered care

The pursuit of professionalism involves a behaviorally oriented approach in daily practice of physicians towards patients. Professionalism is not only an innate character trait or a virtue of medical competencies, but a behavior, defined by profound approaches and medical practices. It is influenced by organizational and environmental contemporary contexts, intending to improve the delivery of health care through relating to patient right to opinion and understanding of the medical process (Lesser *et al.*, 2010).

Professionalism is a complex of multi-dimensional construction, including elements of social psychology and social structure perspectives. It recognizes the relevance of physician's professional behavior to patients' dependency on personal characteristics, as well as on situational and contextual phenomena and institutionalized norms and conventions, arising along practice (Lesser *et al.* 2010; Goldie²⁰¹³).

Professionalism is becoming a major topic in medical care, developing excellence in professionalism. It requires combining of several approaches at individual, interpersonal and societal/institutional levels. Increasing relevant contexts and the number of observers, and encouraging reflection would increase reliability's results and promote a behavior change and physicians' identity formation towards patients. This requires transparency, integrity, accountability and appropriate relationships in the physician-patient's interaction and sometimes, their family members, enabling the involvement in the medical care. Interactions include reporting of medical evaluations, specifying procedures across the medical care and avoiding conflicts of interest with patients, by providing feedback related to the care and reporting of meaningful performance information (Goldie, 2013).

Professionalism requires a dynamic construct, using behaviors and understanding of human and sociological approaches, combined with physicians' interactions within the care delivery system. Professionalism is an acquired competency, nurtured by multidimensional human skills, depending on judgment and practice. Physician-patient interactions requires cultural competence, self-awareness, avoiding conflict of interest, effective communication skills, conflict resolution ability, empathy expression and the ability of understand the patient's needs and skills related to quality proficiency improvement. A "good doctor" has to be emotionally intelligent, be able to keep quality scientific improvement, have training and expertise qualifications and be able to maintain decision-making skills. He has to be reliable, compassionate and capable to base a good relationship with his colleagues and patients (Swensen *et al.*, 2010; Lesser *et al.*, 2010; Goldie, 2013).

Applying professionalism skills in practice requires combining the standardizing of care, measuring performance and using transparent reporting. Professionalism has a growing recognition of its importance; however, the assessment of professionalism has moved from focusing on the development and attainment of professional identity to the attainment of identifiable positive attributes and behaviors (Barone *et al.*, 2016; Swensen *et al.*, 2010). Embracing a diversity of approaches is focusing on individual's behavior, influenced by situational and contextual attitudes. Professionalism assessment from a societal level should be based on decisions' gathering, responses and behaviors of physicians-patients interpersonal relationships. The provision of feedback improves medical teams' performance. The structural elements generating and regulating the practices of the team, its goals and collective behaviors, are encouraging reflection of goals' context and of the healthcare teams' collective behaviors (Goldie, 2013).

Several approaches to attain professionalism are referred to hereinafter.

The SDM approach

The SDM approach characterizes the individual patient with a chronic condition, and his ability to participate in decision-making. It identifies the barriers and facilitators to the model implementation and facilitates the understanding of how new relationships and partnerships between patients and professionals are developed.

SDM tends to resolve tension between patients and healthcare teams. It is aimed to protect patients' interests, tending to avoid physicians' paternalism, by taking mutual responsibility in decisions' making, assuming that patients are able to it and willing to participate in it. In practice, not all patients wish to participate in decisions making, or are capable of making good decisions. Therefore, practitioners should take leadership when patients are unqualified or unwilling to participate in decisions making. However, medical teams should be aware when good or logic decisions are not being made, or rely on informal propositions regarding risks and benefits, and intervene. Patients' decisions quality should be assessed by reasonable contextualized judgements, objectively directed by the medical team, recommending options or denying certain requested procedures. The objectivity of the medical team is a leadership statement, aimed to protect patients' autonomy, enabling him decision-making when he is capable of it, and taking decisions to his interests when he is unwilling or unable to good decisions making (Brown & Salmon, 2019).

The SDM approach in Israel

There are no organized programs to promote SDM at medical schools or affiliated hospitals in Israel, although, courses for improving physician-patient communication were developed and implemented in the curricula of most medical schools. No organized programs promote SDM among healthcare providers (Miron-Shatz *et al.*, 2011). The SDM approach is not routinely implemented in Israel healthcare practice, especially not for clinical decision-making with chronic patients, although it is an important component in changing healthcare culture.

Engaging medical teams to transmit attitudes and skills, is necessary to promote patients shared decision-making and strategies to embed SDM in routine practice in Israel (Karni, 2009).

Patient involvement in their own care has no direct existence in Israeli law. Patients' Rights Law of 1996 indicates patients' rights, limited to a clause in the National Health Insurance Law, requiring health plan description of services and patients' ability to shared involvement upon request. The Patients' Rights Law emphasizes patients' rights solely to health care. The Law defines the rights and obligations of patient-provider healthcare relationships, and emphasizes the shift from a paternalistic model of care to a patient-centered model, based on patient autonomy. The Law intended to define patients' rights and protect their dignity and privacy, by including rights in medical ethics and social and legal norms, such as informed consent, prohibition of discrimination, patients' right to access medical records and medical information privacy (Elwyn & Miron-Shatz, 2010; Miron-Shatz *et al.*, 2012; Israel Patient's Rights Act, 1996).

The Law relates to medical decision-making as performed by physicians, although it cannot be implemented without patients' consent. The Law emphasizes the patients' rights to a second opinion, to be informed of their medical condition, treatment options and risks (Karnieli-Miller, Werner, Neufeld-Kroszynski & Eidelman, 2017). The Law is based on data of diagnosis and prognosis, the proposed treatment, the estimated risks and side effects, the expected benefits and the likelihood of success, in suggested or alternative treatments or in the lack of any treatment at all. Medical information should be supplied to patients to a reasonable extent, to enable them decide if they agree to the proposed treatment (Israel Patient's Rights Act, 1996). These are the hallmarks requirements of a good decision process, according to SDM. Similar rules exist in the US, Canada, Australia, England, Germany, Switzerland, and Austria (Miron-Shatz *et al.*, 2012).

Interpretations of the Israeli Law suggest that a physician-patient dialogue is required as to the proposed treatment and the optional alternatives. The Law states that the physician have to provide the patient with information at the earliest treatment's stage, so the patient could make a free and independent decision. The consent could be given verbally, in writing or demonstrated by the patient's behavior, except for certain treatments, where it must be given in writing. Patient's right to refuse treatment is not absolute and when his life is danger, physicians may consider a treatment against patient's will, although his opinion must be considered. Patient's right to access to medical information is actually also limited in health clinics, in spite of the law (Israel Patient's Rights Act, 1996; Miron-Shatz *et al.*, 2012).

The effects of SDM on Israeli patients', diagnosed with chronic diseases, such as cancer, are mentioned in empirical literature, suggesting that a significant proportion of patients and their family are the best judges over health care decision-making. Literature suggests they prefer to play an active role in decisions, concerning their health (Elwyn, 2010). However, although it has been widely studied, the SDM approach in the context of chronic conditions in the Israeli healthcare is not supported by empirical evidences. It contradicts the extent large number of chronic-ill patients and families' participation in hospitals care, their compliance with treatment, hospitalization experience, health outcomes, safety

issues and quality of care among chronic patients (Karni, 2009; Miron-Shatz *et al.*, 2012).

Moreover, although SDM is often discussed in Israeli medical policy, the extent to which it is practiced is less certain. Little is known about SDM's effect on patients' quality of care in Israeli health settings and on chronic patients, diagnosed with cancer disease in particular. The number of SDM-related research studies do not reflect the relative importance of SDM to the Israeli research community. Only 3% of the research studies related to SDM (Karni, 2009; Miron-Shatz *et al.*, 2012). Some of the few researches engaged topics such as psychiatric and breast cancer patients, and patient participation in improving diabetes management. The empirical evidence reveals that despite the recommendation to integrate SDM in consultations, the SDM benefits and its positive impact on the healthcare quality worldwide, SDM is not adopted by health practitioners in Israel and their approach remains mostly paternalistic (Miron-Shatz *et al.*, 2012; Elwyn, 2010).

The few existing studies in Israel were focusing mostly on existing barriers of SDM implementation. Findings suggested that participant patients wished for involvement in decision-making, but not in final decisions. They perceived SDM as a continuous process of negotiation with limited patients' involvement, focusing on respecting their feelings and their collaboration with the decision process. The research of Maroun & Karnieli-Miller (2012) identified that barriers from practicing SDM included personal barriers, physician barriers and system barriers, and showed that SDM is not practiced to the extent patients want (Maroun *et al.*, 2012, in Karnieli-Miller *et al.*, 2017).

Another qualitative study referred to psychiatrists' lack of willingness to share diagnosis information with patients, placing barriers to patients' in understanding their medical condition and treatment (Moran *et al.*, 2014, in Karnieli-Miller *et al.*, 2017). This attitude has an impact on sharing treatment options and involvement in decisions' process. Results of a psychiatric research indicated that a major barrier to low patients' involvement is a lack of information and training to caregivers. SDM could facilitate partnership and participation. Therefore, a new SDM intervention of supporting decision-making process in mental healthcare in the community was developed upon discharge from psychiatric hospitals. The SDM intervention was added to existing standard hospital procedures before discharge. It presents accessible information regarding rehabilitation options in the community. Following it, participant patients reported greater involvement and knowledge in rehabilitation services (Zisman-Ilani *et al.*, 2017, in Karnieli-Miller *et al.*, 2017).

Regarding cancer care, a study focused on Israeli women after breast reconstruction, reported a level of involvement in the decision-making process. Most participants, 59 of 70, felt involved in the decision-making process. Almost half of them, 34 of 70, indicated they made the final breast reconstruction decision on their own, after having discussed their concerns with the physician. A significant correlation occurred between involvement in decision making process and the decision making style of the patient, encouraging flexibility of physicians towards the decision making process and patients' needs and preferences, by measurements of SDM (Kadmon, Noy, Billig & Tzur, 2016).

A study among social workers found SDM considered favorably, although the participants lacked knowledge of the model and expressed difficulties in defining SDM. The study identified several barriers in SDM implementation from patients and the team point of view. In spite of the growing trend towards involving social service clients in decision-making processes, it is clear from the study, that SDM implementation would be possible in welfare services only after suitable training. Investment should focus in partnership processes and policy change, which are relevant in the Israeli general healthcare system (Levin, Gewirtz & Cribb, 2017; Karnieli-Miller *et al.*, 2017).

In a cross-sectional study, implemented on nursing and psychology students' perceptions, family members' involvement in medical decision-making was examined. The study showed a clear tendency in favor of family members' involvement, especially when patients are incapable of making decisions (Itzhaki *et al.*, 2016). These findings support an additional research in Israel, referring to the dynamics of interactions in patient-physician relationship and the gaps in understanding them, deriving from difficulties of family's integration into the process, emerging by the professional staff, without marginalizing the patient. The difficulties result from lack of skills and a communicative process, deriving from inexistence of rules and understanding of this communication's importance (Karnieli-Miller *et al.*, 2017).

Although there is a legal obligation for informed consent in healthcare treatment in Israel, patient's involvement in decision-making process, their preferences and values do not require consent. Therefore, currently, patient-physician relationships in Israel do not reflect patient's preferences, values and involvement in decision-making (Miron-Shatz *et al.*, 2012). Empirical researches revealed that SDM implementation in chronic care is difficult to implement in practice. The few studies conducted in Israel, aimed to monitor SDM status and implementation in chronic illness practice, and found evident gap between the Israeli health authorities policy regarding patients' empowerment, as a means for achieving higher healthcare quality, and the actual implementation of SDM (Karnieli-Miller & Eisikovits, 2009).

In 2011, the SDM model was not yet a formal, common health policy or a clinical practice in Israel. Paternalistic communication was a common form and decision sharing existed as one sided from physicians' behalf. Since 2011, few sporadic initiatives were taken. Only one of the five Israeli medical schools (the Tel-Aviv University) integrated SDM into the curriculum, and SDM is taught there as part of a theoretical mandatory course on humanism in medicine. This course relates to implications and interpretations of the Patient's Rights Law, and refers to SDM as an ethical imperative and as part of theories of communication in healthcare. No formal hospital or health organizations initiatives exist on this subject, although short training sessions on SDM are offered by some organizations, such as DCure Advancing Diabetes Care to Cure or the Israel Cancer Association (Karnieli-Miller *et al.*, 2017).

On 2017, the Israeli Ministry of Health initiated a national conference (the 17th Dead Sea Conference, in Karnieli-Miller *et al.*, 2017) to discuss major PCC relating to health policy issues and health system improvement. SDM was the focus of some discussions for future establishing its implementation. Recommendations

were given for adapting SDM in established training within the healthcare systems, aligning with the initiatives of five public hospitals to implement newly developed platforms that enable patients an access a library of medical procedures. An initiated call for research proposals emphasizes that the implementation of SDM is in a very early stage in Israel (Karnieli-Miller *et al.*, 2017).

This was Strengthened in the 13th Israel Convention (2018), where Dr. Segev-Raz claimed that although SDM is intended to share medical information within medical and caregiver teams and with patients, attaining an agreed treatment is actually implemented in low level in all medical fields in Israel. Segev-Raz maintained a research between nursing caregiver^s teams at 34 clinics in Israel, treating mental health issues, pediatric and physical disabilities. The research referred to several components of SDM, and found that 94.1% of the participants' personnel in the study never defined the treatment aims. 47.1% did not refer to whether they raised the SDM issue. 52.9% never asked the patient of his preferences. 64.7% did not present to the patient the advantages and disadvantages of the care options. Segev claimed that this research was the first one in Israel, examining interrelation between SDM components (Segev-Raz, 2018).

Accordingly, critical questions are raised, regarding potential contradictions between the call for SDM in caregiver-patient relationships and the ethos of policy maker-caregivers-patients' relationships. Israel's heterogeneous population, a complex mixture of immigrants from different countries and from three major religions (Judaism, Christianity and Islam), might be one of the reasons to ignoring patients' will (CBS, 2018). This diversity of patients and caregivers creates different beliefs and outlooks of the degree to which physicians serve as the absolute medical authority. Therefore, exploring decisions making made in chronic care in Israel, is a required step to understanding patients and practitioners' attitudes, concerning patients' involvement in decision-making processes (Karni, 2009; Miron-Shatz *et al.*, 2012).

The Chronic Care Model (CCM)

The management of chronic diseases and health problems is becoming the major component of primary care. In addition, an increased need exists for quality skills, leadership and practice improvement in chronic disease management, especially in primary care settings (Fiandt, 2006). Management of multiple chronic conditions requires a transformation in health care, especially when patients suffer from multiple chronic conditions in current management of cancer, diabetes, heart disease and more. The deficiencies include rushed practitioners not following established practice guidelines; lack of care coordination and planned care; lack of active follow-up to ensure the best outcomes; inadequate trained patients, to manage their illnesses. Overcoming these deficiencies requires a transformation of health care services to a proactive system, focusing on keeping the population as healthy as possible. Improving clinical outcomes of patients with a chronic health problem requires a multifaceted approach (Bodenheimer, Wagner, & Grumbach, 2002).

The CCM was developed in the 1990's by Dr. Wagner and collaborators in Seattle, USA as an approach to re-organize primary care and implement critical elements for patients with chronic conditions. The model was initiated to improve quality of chronic care in the perspective of complexity of chronic illnesses. Improving it required effective diagnostic procedures and treatments; greater emphasis on educational actions for self-care; teams professional knowledge, skills of listening, communicating, leading, evaluating and working in a team; organization directed attitudes of empathy, welcoming, motivating, flexibility, creativity and initiative, and planning of such practices. The CCM was thought to be efficacious and cost reducing. However, it has emerged as one of the most important challenges to modern healthcare systems (Arbelle *et al.*, 2014; Boehmer *et al.*, 2018; Si, Baillie Menzies & Weeramanthri, 2008).

Patients' assessment of clinician support of the CCM has been associated with higher levels of self-management. Although patients are generally inexperienced and passive recipients of medical care, when chronic disease becomes the main medical problem, patients have to become partners in the medical care process. They might contribute to decisions and action level and in fact, they deserve partnership in their own health care, especially as health care is more effective and efficient when they are involved. Effective communication between physicians and patients is essential to quality health care and to the patient outcomes improving (Street & Mazor, 2017). Physicians have to understand patients' perceptions of their illness to effectively update and inform them of the illness' findings, the diagnoses and relevant therapies. Adequate communication is essential for self-management, to reduce physical and psychological morbidity, to achieve compliance with medication, to prevent unplanned hospital re-admission, and to inform and finalize decision-making (Kourakos *et al.*, 2017).

The CCM is designed as an organizing framework for improving chronic illness care. It is a well-established organizational framework for chronic care management and practice improvement. The model is aimed for a structural change in the way people with chronic illnesses are taken care, and it engages the participation of nurses, social workers and patients themselves. It is an excellent tool for improving care of individual and population level, especially in cultures with optimal management of chronic illnesses and practice improvement. The comprehensive multisystem approach of the CCM makes it ideal for vulnerable populations. It is based on the assumption that improvements incorporates patients, healthcare providers and system level interventions, to address the needs and concerns of chronically ill patients (Kreisberg *et al.*, 2016; Caban, 2017).

The CCM consists of six distinct concepts, identified as modifiable components for improving care in health systems at the community, organizations, practices and patient levels: organizational support; clinical information system; delivery of system design; decision support; self-management support and community resources. The first four concepts of the CCM address practice strategies and the other two are specifically patient centered. Chronic disease management and practice improvement can be based on each of the concepts separately or on the model as a whole (Fiandt, 2006). The CCM is focusing on achieving improved outcomes in chronic healthcare, through more productive interactions between patient and the medical team. All the model six elements mentioned

above support this aim and can be effectively accomplishable. CCM is becoming an important strategic framework for innovation in healthcare community. Its innovative interventions enable disease management and practice improvement programs and initiatives (Parsricha *et al.*, 2012).

Organizational support of health care addresses the culture of practice and the system leadership. Health care systems should create an environment in which organized efforts improve care, treatment culture, organizations and mechanisms promoting safe and high-quality care. The effort to improve care should be woven into the organization and aligned with a quality system improvement. Senior leadership must identify the necessary effort to improve chronic and preventive care, translate it into clear goals, reflected in health center's policies, procedures, business plan, and financial planning. They have to support the personnel to achieve the entire organization engagement to the improvement effort (Kreisberg *et al.*, 2016).

A critical component of the CCM is self-management support and the patient-centered intervention, which enable patients managing their chronic illness conditions. Self-management support interventions, and enable patients with long-term health conditions the responsibility for managing their own illness and healthcare on a day-to-day basis. Developing self-management skills can have a significant positive effect on health outcomes of patients with chronic illnesses. Self-management support can inspire patients, widen their knowledge of their illness and the required conditions, empower them, enabling them an active role in their health care. Interventions include tailored education resources; skills training; psychosocial support; collaboration of physicians-patients and problems defining; priorities' setting; goals establishment; barriers identifying; treatment plans creation; problems solving on the base of information provision about the disease; understanding self-management; skill building; the development of ongoing support from the medical team, family, friends and community. The CCM may deliver preventive care, providing the restructuring of partnership medical care between health teams and patients, to promote health, prevent and manage chronic diseases (El-Said *et al.*, 2018; Schaffler *et al.*, 2018).

The CCM application worldwide

A research of Cardiovascular Disease, set in the USA, indicating that this is the leading cause of death in the USA, found CCM as a most efficient model for treating chronic patients. The CCM contributed to reforming health care through the interactions of the six interrelated elements of the model, especially the community component of the CCM, by tele-monitoring homecare setting related to the management of chronic heart failure disease among adult Hispanics' hospital re-admission rates. The researcher have applied benefits of CCM to community settings and found it a well-suited mean to address chronic health issues (Caban, 2017).

Barbosa *et al.* (2018) examined the CCM over older people with diabetes mellitus and/or hypertension in the Primary Health Care in Brazil. The researchers used the CCM to identify associations with care outcomes. They evaluated the quality of patients' care, examining and comparing care outcomes, including

biochemical parameters, body mass index, pressure levels and quality of life. The researches did not find statistical difference between the medians of the overall PACIC score and individual care outcomes. However, the quality of life and health satisfaction evaluated, showed a statistical difference between the medians. Research conclusions claim that the low PACIC scores found, indicate that chronic care according to the CCM and seems to falls short of its assumptions (Barbosa, 2018).

A research examining chronic patients with multiple chronic problems in Canada and the USA chose the Minimally Disruptive Medicine (MDM) of uncoordinated responses, aiming to improve outcomes that matter to patients with minimal burden of treatment, and examined the extent to which MDM is reducing patient engagement in his illness and improving patients' capacity within CCM implementations. The researchers found that CCM implementations were mostly aligned with the healthcare system's goals, conditions' specifics and targeted disease-specific outcomes. Few of the patients reduced treatment workload without additional tasks. Implementations supported patient capacity by offering information, helping patients reframe their chronic illness biography or assisted them in engaging with a supportive care (Boehmer *et al.*, 2018).

An additional qualitative research, was conducted among patients and their representatives, receiving care from physician assistant/associate in acute hospital services in England. The research showed satisfaction among patients and their representatives, a feeling of trust and confidence in the relationship, leading to sharing relevant and meaningful information, experiencing emotional care and support, and sharing discussion on illness management and treatment. The research showed a constructive example of successful clinician-patient communication experience (Taylor, Halter & Drennan, 2019).

Disease-management programs based on CCM improved the chronic care-delivery's quality over time and predicted short and long term changes in the sustainability of projects, such as disease-management programs and multicomponent interventions. Evidences of researches in the Netherlands suggest that the CCM model changes the processes and outcomes of chronic care delivery. It might transform the system of chronic disease care delivery from acute and reactive to proactive and planned. Interventions based on CCM improved quality of chronic care and chronically ill patients' outcomes. Disease-management programs in the Netherlands are based on the CCM model. Primary care organizations redesigned their practices and developed new interventions implementation with the model, integrated into activities for chronic care delivery by clinicians and program staff (Cramm & Nieboer, 2014).

The CCM describes elements that should be implemented to support patients with chronic conditions; however, it does not instruct how these implementations should handle multiple illnesses. CCM could be applied to handle multiple individual conditions. Disease and treatment create interactions between the biomedical and the socio-personal context of patients. It does not support carrying each condition separately. A whole-person primary care for patients with multi-morbidity, supplied by caregivers, may become inefficient by chronic care, which ignores the accumulation of tasks (Boehmer *et al.*, 2018).

Subsequent to the CCM development, several approaches are implemented to quality improving and comprehensive primary care, including chronic diseases management care, which is important for prevention and treatment. Based on the interventions under the elements of the CCM model, chronic diseases management might improve (Reynolds *et al.*, 2018).

The CCM application in Israel

Preventive medicine is the strategy used for coping with chronic diseases, although it is not yet determined how its implementation affects primary care. Shor *et al.* (2019) conducted a cross-sectional survey in order to assess and compare preventive medicine and health activities in solo working independent physicians, compared with nurse-physician collaborations and teamwork of nurses, dietitians, social workers and a physician. The research was held on 1203 health professionals, working at Maccabi Healthcare Services, the second largest Israeli healthcare organization. Higher rates of proactive appointments scheduling and health education groups were found in the Teamwork and Collaboration models, compared to the Independent Physician Model. Group facilitation training and personal screening adherence were higher identified as preventive medicine and health implementation predictors in the teamwork and collaboration models, compared to the Independent Physician Model. These results suggest that multidisciplinary primary care models may contribute to population's health by implementing preventive medicine, using the CCM, which was much more effective than the Independent Physician Model (Shor *et al.*, 2019).

The demand for medical services for chronic diseases is growing worldwide. Therefore, consuming medical resources is mainly hospital-based. Yet, the chronic nature of endocrine morbidity and the great demand for endocrinology services is community based. Neither endocrinologist nor hospital facilities can cope with the rapid changes in the field. To overcome limits, the Community- Hospital Integrative Model of Healthcare (Co-HIMH) model was embraced, developed and implemented in Israel, especially in governmental hospitals. Its approach present the pursuit of achieving excellence in endocrinology care. The model, originally, is based on three pillars: the hospital unit as a regional expertise resource; the Co-HIMH endocrine providers, participating in community and hospital services; integrated information flowing between health-care providers, supported by the integration between hospital and community networks. The Co-HIMH model is based on the CCM, the PCC model, the Cultural Competence and the Continuity of Care concepts. Each model addresses specific needs of chronically ill patients, living in a culturally diverse population, dealing with financial, cultural, linguistic and service oriented barriers. These models serve as important milestones within the healthcare system, aimed to elevate its quality and reduce patients morbidity, supplying a good basis to the Co-HIMH model (Jaffe, Yoselis & Tripto-Shkolnik, 2015).

Collaborative interaction between healthcare providers are increasing continuity of care and efficient patient navigation. Along the Co-HIMH implementation, it certified 14% of all endocrinology fellows in Israel. Based on limited resources and increased healthcare demand, the Co-HIMH model provides creative infrastructures for a successful preliminary model, which meets future needs (Jaffe *et al.*, 2015).

Conclusion

The CCM and the SDM models serve both as a theoretical framework, emphasizing the importance of illness self-management skills and shared decision-making in patients-physician relationship. Involving patients is important to a better management of chronic healthcare. It reconstructs the recognition of patients own rights to treatment preferences, and emphasizes the production of physicians-patients interactions, leading to better health outcomes. The CCM and the SDM models engage patients in their health, enabling chronic patients a self-management of their illness. Both models empower patients, raise their autonomy, and include potential improvement of patients' medical situation and treatment outcomes. Treatment adherence is consequently raised, and so are patients' perceived ability of management of their cancer disease and lower levels of anxiety. Therefore, it should be implied in Israel for the best of patients, physician and the healthcare system.

References

- (CBS) Central Bureau of Statistics. (2018). *Population, by population group*. Retrieved June 17, 2018, from http://www.cbs.gov.il/shnaton67/st02_01.pdf
- ABIM Foundation; ACP Foundation (2005). *Medical Professionalism in the New Millennium: A Physician Charter*. European Federation of Internal Medicine. <https://abimfoundation.org/what-we-do/physician-charter>
- Ahlsten, B., Engebretsen, E., Nicholls, D. & Mengshoel, A.M. (February 2019). The singular patient in patient-centred care: physiotherapists' accounts of treatment of patients with chronic muscle pain. *Medical Humanities*, 0: 1-12.
- Arbelle, J.E., Chodick, G., Goldstein, A. & Porath, A. (2014). Multiple chronic disorders - health care system's modern challenge in the Maccabi Health Care System. *Israel Journal of Health Policy Research*, 3, 29-36.
- Barbosa Silva, L., Soares, S.M., Silva, P.A.B., Santos, J.F.G., Miranda, L.C.V. & Santos, R.M. (2018). Assessment of the quality of primary care for the elderly according to the Chronic Care Model. *Review Latino-American Enfermagem*, 26, e2987, 2-12.
- Barone, M.A. *et al.* (2016). Chapter 2: Professionalism In Patient Care: in N.D. Spector & R.F Trimm (Eds.), *Teaching, Promoting, and Assessing Professionalism across the Continuum: A Medical Educator's Guide* (pp. 10-15). 2nd Edition. The American Board of Pediatrics and the Association of Pediatric Program Directors.
- Bodenheimer, T., Wagner, E.H. & Grumbach, K. (2002). Improving primary care for patients with chronic illness: The Chronic Care Model, part 2, *JAMA*, 228(15), 1909-1914..
- Boehmer, K.R., Abu Dabrh, A.M., Gionfriddo, M.R., Erwin, P. & Montori, V.M. (2018). Does the chronic care model meet the emerging needs of people living with multimorbidity? A systematic review and thematic synthesis. *Plos One*, 13(2), e0190852, 1-12.
- Brown, S.L. & Salmon, P. (2019). Reconciling the theory and reality of shared decision-making: A "matching" approach to practitioner leadership. *Health Expectations*, 22, 275-283.

- Caban, P.L. (2017). *Effect of Home Tele-monitoring on Heart Failure Hospital Readmissions among Adult Hispanics*. Doctoral dissertation. Walden Dissertations and Doctoral Studies Collection. <https://pdfs.semanticscholar.org/a400/595c4fffb78-d3a9564e228fee3cc21fd4f6a.pdf>
- Cramm, J.M. & Nieboer, A.P. (January 2014). Short and long-term improvements in quality of chronic care delivery predict program sustainability. *Social Science & Medicine*, 101, 148-154.
- El-Said, A., El-sol, H., Khalil, R. & Babikir, M. (2018). Nursing: Chronic care model for diabetes mellitus. *National Journal of Advanced Research*, 4(1), 118-123.
- Elwyn, G. & Miron-Shatz, T. (2010). Deliberation before determination: the definition and evaluation of good decision-making. *Health Expect*, 13, 139-147.
- Elwyn, G., Stiel, M., Durand, M.A., & Boivin, J. (2010). The design of patient decision support interventions: Addressing the theory–practice gap. *Journal of Evaluation in Clinical Practice*, 17(4), 565-574.
- Ernst, A. (2013). Shared decision-making: Engaging patients to improve health care. http://familiesusa.org/sites/default/files/product_documents/Shared-Decision-Making.pdf
- Fianndt, K. (2006). The Chronic Care Model: Description and Application for Practice. *Topics in Advanced Practice Nursing eJournal*, 6(4).
- Friesen-Storms, J.H., Bours, G.J., Van der Weijden, T., & Beurskens, A.J. (2015). Shared Decision Making in chronic care in the context of evidence based practice in nursing. *International Journal of Nursing Studies*, 52, 393-402.
- Goldie, J. (2013). Assessment of professionalism: A consolidation of current thinking. *Medical Teacher*, 35, e952-e956.
- Israel Patient's Rights Act (1996). <http://www.iracm.com/wp-content/uploads/2013/01/loi-sur-les-brevets-1996-anglais-3539.pdf>
- Itzhaki, M., Hildesheimer, G., Barnoy, S. & Katz, M. (2016). Family involvement in medical decision-making: Perceptions of nursing and psychology students. *Nurse Education Today*, 40, 181-187.
- Jaffe, A., Yoselis, A. & Tripto-Shkolnik, L. (2015). Better together: a community- hospital integrative model of healthcare as a practical solution for providing excellence in endocrinology care in an era of limited resources. *Israel Journal of Health Policy Research*, 4(28), 1-8.
- Kadmon, I., Noy S., Billig A. & Tzur T. (2016). Decision-making styles and levels of involvement concerning breast reconstructive surgery: An Israeli study. *Oncology Nursing Forum*, 43(1), E1-E7.
- Karni, E. (2009). A theory of medical decision making under uncertainty. *Journal of Risk and Uncertainty*, 39, 1-16.
- Karnieli-Miller, O & Eisikovits, Z. (2009). Physician as partner or salesman? Shared decision-making in real-time encounters. *Social Science Medicine*, 69(1), 1-8.
- Karnieli-Miller, O., Miron-Shatz, T., Siegal, G. & Zisman-Ilani, Y (2017). *On the Verge of Implementing Shared Decision Making in Israel: An Overview and Future Directions*
- Karnieli-Miller, O., Werner. P., Neufeld-Kroszynski, G. & Eidelman, S. (2012). Are you talking to me?! An exploration of the triadic physician-patient-companion. *Patient Education and Counseling*, 88, 381-390.

- Kourakos, m., Fradelos, E.C., Papathanasiou, I.V., Saridi, M. & Kafkia, T. (2017). Communication as the Basis of Care for Patients with Chronic Diseases. *American Journal of Nursing Science*; 7(1-3), 7-12.
- Kreisberg, D., Thomas, D.S., Valley M., Newell, S., Janes E. & Little C. (April 2016). Vulnerable Populations in Hospital and Health Care Emergency Preparedness Planning: A Comprehensive Framework for Inclusion. *Prehospital disaster Medicine*, 31(2), 211-219.
- Légaré, F. & Thompson-Leduc, P. (2014). Twelve myths about shared decision-making. *Patient Education and Counseling*, 96, 281-286.
- Légaré, F., & Witteman, H.O. (2013). Shared Decision Making: Examining key elements and barriers to adoption into routine clinical practice. *Health Affairs*, 32(2), 276-284.
- Légaré, F., Turcotte, S., Stacey, D., Ratté, S., Kryworuchko, J., & Graham, I.D. (2012). Patients' perceptions of sharing in decisions. *The Patient*, 5(1), 1-19.
- Lesser, C.S., Lucey, C.R., Egner, B., Braddock III, C.H., Linas, S.L. & Levinson, W. (December 2010). A behavioral and systems view of professionalism. *JAMA*, 304(24), 2732-2737.
- Levin L, Gewirtz, S. & Cribb, A. (2017). Shared decision making in Israeli social services: Social workers' perspectives on policymaking and implementation. *The British Journal of Social Work*, 47(2), 507–523.
- Mah, H.C., Muthupalaniappen, L., & Chonga, W.W. (2016). Perceived involvement and preferences in shared decision-making among patients with hypertension. *Family Practice*, 33(3), 296-301.
- Miron-Shatz, T., Golan, O., Brezis, M., Siegal, G. & Doniger, G.M. (2011). The status of shared decision-making and citizen participation in Israeli medicine. *Science Direct*, 105, 271-276.
- Miron-Shatz, T., Golan, O., Brezis, M., Siegal, G., & Doniger, G. M. (2012). Shared decision-making in Israel: Status, barriers, and recommendations. *Israel journal of health policy research*, 1(1), 1-8.
- National Quality Forum (NQF) (2012). *Multiple Chronic Conditions Measurement Framework*. Washington DC: National Quality Forum. file:///C:/Users/Downloads/MCCFinalReport%20(1).pdf
- Nota, I., Drossaert, C., Taal, E., Vonkeman, H.E., & van de Laar, M. (2014). Patient participation in decisions about disease modifying anti-rheumatic drugs: A cross-sectional survey. *BMC Musculoskeletal Disorders*, 15, 333-344.
- Parsricha, A., Deinstadt, R.T.M., Moher, D., Killoran, A., Rourke, S.B., & Kendall, C.E. (2012). Chronic care model decision support and clinical information systems interventikons for people living with HIV: A systematic review. *Journal of General Internal Medicine*, 28(1), 127-135. doi: 10.1007/s11606-012-2145-y
- Reynolds, R., Dennis, S., Hasan, I., Slewa, J., Chen, C., Tian, D., Bobba, S. & Zwar, N. (2018) .A systematic review of chronic disease management interventions in primary care. *BMC Family Practice*, 19(11), 1-13.
- Santana, M.J., Ahmed, S., Lorenzetti, D., Jolley, R.J., Manalili, K., Zelinsky, S., Quan, H. & Lu, M. (2019). Measuring patient-centred system performance: a scoping review of patient-centered care quality indicators. *BMJ*, 9(1), e023596, doi: 10.1136/bmjopen-2018-023596

- Santema, K., Stoffer, E.A., Kunnean, M., Koelemay, M., & Ubbink, D.T. (2016). What are the decision-making preferences of patients in vascular surgery? A mixed-methods study. *BMJ*, 7(2), e013272.
- Schaffler, J., Leung, K., Tremblay, S., Merdsoy, L., Belzile, E., Lambrou, A. & Lambert, S.D. (April 2018). The Effectiveness of Self-Management Interventions for Individuals with Low Health Literacy and/or Low Income: A Descriptive Systematic Review. *Journal of General Internal Medicine*, 33(4), 510-523, doi: 10.1007/s11606-017-4265-x
- Schor, A., Bergovoy-Yellin, L., Landsberger, D., Kolobov, T. & Baron-Epel, O. (2019). Multidisciplinary work promotes preventive medicine and health education in primary care: a cross-sectional survey. *Israel Journal of Health Policy Research*, 8(50), 1-11, doi: 10.1186/s13584-019-0318-4
- Segev-Raz, L. (2018). Research of shared decision-making in occupational therapy care. *Book of Abstracts of the 13th Israel Convention, on May 9, 2018*. The Israel National Research Institute for Health Policy (Hebrew text).
- Si, D., Baillie Menzies, R. & Weeramanthri, T. (2008). Effectiveness of chronic care model-oriented interventions to improve quality of diabetes care: a systematic review. *Primary Health Care Research & Development*, 9, 25-40.
- Street Jr., R.L. & Mazor K.M. (2017). Clinician–patient communication measures: drilling down into assumptions, approaches, and analyses. *Patient Education and Counseling*, 100(8), 1612-1618.
- Swensen, S.J., Meyer, G.S., Nelson, E.C., Hunt, Jr., G.C., Pryor, D.B., Weissberg, J.I., Kaplan, G.S., Daley, J., Yates, G.R., Chassin, M.R., James, B.C. & Berwick, D.M. (2010). Cottage industry to postindustrial care - the revolution in health care delivery. *New England Journal of Medicine*, 362(5), e(12)1-4.
- Taylor, F., Halter, M. & Drennan, V.M. (2019). Understanding patients' satisfaction with physician assistant/associate encounters through communication experiences: a qualitative study in acute hospitals in England. *BMC Health Services Research*, 19, 603-613.
- The World Health Report (2008). *Primary Health Care (Now More Than Ever)*. <https://www.who.int/whr/2008/en/>