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Medical Family Therapy: Charting a Course in Competencies

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Abstract   The skills and training medical family therapists need to be effective in their work is an underdeveloped area in the literature. Training programs in Medical Family Therapy (MedFT) currently vary in duration, intensity, and focus of material and most of this is due to the minimal research done on what core competencies are needed. The results presented in this paper are the product of a larger modified Delphi (Dalkey in Studies in the quality of life, Lexington Books, Lexinton, MA, 1972) study designed to reach consensus regarding the current definition, scope, and practice of MedFT. Thirty-seven experts in MedFT participated in this two-phase investigation. What resulted and will be reported on in this article are the training requirements and recommended core competencies for the practice of MedFT. Participants indicated that 12 academic course content areas and 13 core competencies should be required of those seeking training in MedFT. Recommendations for MedFT core competencies at the master's, post master's, and doctoral levels, as well as advancements for future research, are described in detail.

Keywords   Competencies · Medical Family Therapy · Training · Family Therapy · Collaborative healthcare

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Introduction

The first text on Medical Family Therapy (MedFT) appeared in McDaniel et al. (1992). Since that time there has been an increasing interest in MedFT in the literature and in academic programs (Tyndall et al. 2010). Initially, MedFTs were trained through post-degree programs such as the MedFT intensive course offered at the University of Rochester Medical Center (URMC 2012), internships, workshops, and as concentrations within already existing degree programs. Currently, there are degree programs and rigorous training institutes that are designed to prepare marriage and family therapists (MFTs) and providers from other health-related disciplines in the practice of MedFT. With an increase in training opportunities, consensus is needed on what courses and competencies would prepare someone to be skilled in MedFT. Without a standardized curriculum, graduates from programs might present a disparate image of MedFT to an already uncertain healthcare industry. Therefore, communicating clearly and effectively the unique training and strengths that MedFTs bring to a medical setting is as important as the interventions, research, leadership, and program development provided by mental health professionals.

Professional Competencies

MedFT is not the first developing profession to work towards identifying competencies. In fact, in the practice of family medicine there has been an ongoing conversation about competencies and the assessment of these competencies. Marvel and Major (1999) examined behavioral health competencies in family medicine physicians by surveying over 600 practicing family physicians and asking them to rate the importance of knowledge about various behavioral health domains. In 2011, Baglia et al. continued to deconstruct the process of assessing students' level of competency by working to bring the abstract competencies into more concrete observable behavior changes in residents, "The principles of outcomes-based assessment require that explicit efforts be directed toward identifying actual changes in learners' knowledge, behaviors, and attitudes rather than relying on completion of a time-based requirement as evidence of competence" (p. 90). Both of these studies reflected elements of a Delphi method (Dalkey 1972) by asking field experts to rate various competencies on a likert scale (Marvel and Major 1999) or working with a group of faculty members to reach consensus on a list of competencies (Baglia et al. 2011). While the methods used in these studies were different from the Delphi method, for example one survey was conducted in a face-to-face format rather than an anonymous questionnaire (Baglia et al. 2011), the overall goal, similar to the Delphi method, was to reach consensus and to help direct future movement in these professions.

As collaboration among healthcare professions increases, both in the United States, and abroad, competencies that would be required of all healthcare providers have been examined as well. The College of Health Disciplines at the University of British Columbia (2008) developed a "Competency Framework for Interprofessional Collaboration" of which the goal was to inform the continuing education process for healthcare professionals from across disciplines. These competencies were organized into three domains: interpersonal and communication skills, patient-centered and family-focused care, and collaborative practice. Recognizing that creating competencies for a field that is relatively new is difficult, the Canadian Interprofessional Health Collaborative (2010) created a standard of interprofessional competencies for healthcare providers as well. The United States has also examined competencies for the field of Interprofessional Collaboration, arguing that core competencies are needed, for example, to help guide professional and institutional development of learning

approaches, coordinate the effort to create essential learning content in all healthcare professions and to guide licensing and professional credentialing (IPEC 2011). It is clear that the identification and assessment of competencies is an ongoing discussion in a variety of professional fields, from long-standing professions such as family medicine to new models of service such as integrated care. The timing is also right for MedFT to begin a more formal process of identifying competencies and comparing curriculums to streamline the training and improve evaluation and measurement of MedFT outcomes.

Training Opportunities in MedFT

There are currently ten professional preparation programs in the United States in MedFT including two doctoral degrees and eight programs that offer certificates, concentrations, and/or other focused training opportunities (see Table 1). Similarities among the programs exist in both training opportunities in medical settings and across course topics. For example, the study of the intersection of families and illness is clear, and not surprising, as well as the focus on collaboration. Another similarity includes some clinical supervision through practicums, however lengths of clinical exposure and depth of submersion and supervision differs with the varying levels of degrees or certificates. Programs also have a variety of special topics, including pharmacology, children with special needs, varying levels of research training, and the business side of MedFT clinical services. While several of the following training programs use MedFT in their title, others have adopted a title that reflects specialized areas for the MedFT practitioner or researcher (e.g., any combination of families, systems, illness, collaboration, and health).

Doctoral programs differ from their master's degree and certificate counterparts largely with the emphasis on research and teaching. East Carolina University (ECU) launched the first MedFT doctoral program in the fall of 2005 (ECU 2012) and the University of Nebraska-Lincoln's doctoral program began shortly thereafter. Both programs offer students the opportunity to conduct MedFT research, have strong ties to their respective family medicine departments, and heavily emphasize the foundational underpinnings of the biopsychosocial-spiritual model and systems thinking (ECU 2012; UNL 2012). Loma Linda University (LLU) offers a concentration in Families, Systems, and Health at the doctoral level where interdisciplinary research is also strongly encouraged (C. Knudson-Martin, personal communication, February 13, 2012). All three programs offer students the opportunity to gain research experience in a variety of collaborative care medical contexts.

A majority of the master's programs share similar foci as well, but differences also exist. For example, master's programs focus especially on family therapy and the intersection of families and illness, while differing in whether or not a complementary medicine class is included. Courses include spirituality and health, pharmacology, and business policy related to developing a collaborative practice. Mercer University's program is one that differs from the other programs as it addresses training from two different focal points: the therapist and the burgeoning doctor. Their aims include training MFTs to successfully provide mental health care in both medical and non-medical settings, as well as training medical students to conceptualize the patient and his/her illness within a broader social and family context and to facilitate and improve the relationship between provider and patient. While differences do exist among these master's and certificate programs, it seems that they share a similar goal of educating clinicians on the importance of seeing and working with the patient from a biopsychosocial framework (Engel 1977, 1980) while appreciating how they are embedded in their ecosystemic contexts.

Table 1 Training in MedFT

Institution	Level of training(s)	Program/certificate name	Curriculum: course content and field work
Chicago Center for Family Health (2003, 2007)	Post Master's Certificate Three Day Institute Doctoral Fellowship	Families, Illness and Collaborative Healthcare	Impact of illness on family with developmental perspective, death and loss, family resiliency Participate in multidisciplinary teaching conferences, teaching residents and medical students about the integration of family systems approaches healthcare, collaboration with healthcare providers, and clinical research projects related to families and healthcare
Dartmouth Family Practice Residency, Concord Hospital	Doctoral Internship	Community and Family Medicine	Clinical, teaching, and research experiences relevant to working in a family medicine residency setting
Drexel University (2012)	Online Post Master's Certificate	Medical Family Therapy	Illness through a life-cycle perspective, analysis of healthcare policy, applying family systems work to families with healthcare challenges
Duke University Health System, Cancer Patient Support Program	Doctoral and Master's Level Internships	Cancer Patient Support Program	Doctoral Internship involves clinical services and research Masters Internship involves clinical services only
Duke/Southern Regional AHEC	Doctoral Internship	Family Medicine Residency Program	Clinical, teaching, and research experiences relevant to working in a family medicine residency setting
East Carolina University (2012)	Doctoral Degree Doctoral Internships	Medical Family Therapy Internships in adult and pediatric community healthcare centers	Research methods, theory (clinical, policy, and financial), illness and disability, healthcare economics, gender and ethnicity, supervision, master's and doctoral field work in primary, secondary, and tertiary care settings
Loma Linda University	Concentration in Marriage and Family Therapy Doctoral program Post Master's Certificate	Concentration: Families, Systems, and Health Post Master's Certificate: MedFT	Social context of health, families and illness, medicine and family therapy, and a special project course Clinical experience in primary care, renal transplant center, pediatrics and family medicine
Mercer University (2004)	Post Master's Certificate	Medical Family Therapy	Pediatric medical family therapy, advanced developmental theory in family therapy, methods in medical family therapy, chronic illness (death and dying), and a one semester practicum

Table 1 continued

Institution	Level of training(s)	Program/certificate name	Curriculum: course content and field work
Nova Southeastern University (2011)	Post Master's Certificate and specialized doctoral level track	Family Systems Healthcare	Systems theory, marital and family therapy theories, healthcare policy, optional practicum placements
Seattle Pacific University (2012)	Post Master's Certificate	Medical Family Therapy	Collaboration between therapist and physician, motivational interviewing for patient and family health, marketing your practice to physicians, spirituality and health, supervision, and an internship with a multi-disciplinary team
St. Mary's Hospital: The Regional Medical Center	Doctoral Internship	Grand Junction Medical Family Therapy Doctoral Internship	Clinical experience in both a family medicine clinic and a homeless outreach center and actively engaged in research with a heavy emphasis on integrated care models, and teaching of the behavioral science curriculum if desired
University of Minnesota in Minneapolis, St. Paul	Doctoral Internship	Family Medicine and Community Health	Clinical, teaching, and research experiences relevant to working in a family medicine residency setting
University of Nebraska-Lincoln (UNL 2012; UNMC, 2011)	Post Master's/Graduate Certificate Doctoral Degree	Medical Family Therapy	Psychopathology, ethics, sexual dysfunction, pharmacology, family therapy, collaborative healthcare Master's and doctoral internships associated with Family Medicine Department
University of Rochester (2012)	Summer Institute and Post Master's Certificate Doctoral Level Internship	Medical Family Therapy Family Medicine	Emphasis on major family therapy models, family development theories, and research Clinical, teaching, and research experiences relevant to working in a family medicine residency setting.
University of San Diego (n.d.)	Master's Degree in Marriage and Family Therapy with MedFT Emphasis	Medical Family Therapy	Social Neuroscience for Family Therapists, Families of Children with Special Needs, Collaborative Care, and Psychopharmacology and the Brain, and master's and doctoral field work in primary, secondary, and tertiary care settings

Program information listed may not be a complete list of courses offered or required

Internships are an essential part of preparation in MFT and MedFT at the graduate level. It is by immersion in the culture that students learn how the biomedical context is different than a traditional mental health context, how to interact and best collaborate

with other health care professionals, how to speak the language of collaboration (Seaburn et al. 1996), and how to teach or conduct research through a biopsychosocial lens. MedFT internships and post-doctoral training take place in a variety of institutions and the availability of specific internships created by various training programs may change from year to year. While master's level internships place emphasis on clinical work, doctoral level internships include research and teaching experiences as well. Placements typically range from primary to tertiary care settings. Information gathered on MedFT internships is included in Table 1 and was sourced largely from the institutional websites and personal communication with program faculty. A summary of MedFT internship sites has not been conducted since Brucker et al.'s 2005 article in which seven doctoral-level internships were outlined. While several of those internships are still active, some of the conditions of the internships and the availability have changed.

MedFT Core Competencies

There is no standardization in curriculum or core competencies across the various degrees and training opportunities in MedFT. Commonalities do appear to exist when reading the descriptions of each training program. For example, the practicum sites included in the trainings generally involve the placement of a MedFT within a family medicine, primary care, or specialty setting where they learn to function within a medical culture. Coursework tends to focus on therapy with individuals, couples, and families affected by chronic illness, trauma, disability, or loss and is informed by a biopsychosocial perspective (Engel 1977, 1980). A theme of collaboration, with healthcare professionals, patients, and families defines a majority of the programs. Programs differ on the inclusion of specific training foci to develop student competency is areas such as spirituality, psychopharmacology, integrated care, and family resiliency, but share a common view of MedFT as inclusive of those who are trained to apply a biopsychosocial, collaborative, and systemic lens in a variety of medical settings.

In 2004, the American Association of Marriage and Family Therapy (AAMFT) published its most recent core competencies for the practice of marriage and family therapy. The competencies were developed in a collaborative effort by AAMFT staffers, along with a task force committee, and interested stakeholders. Several critical reports, *Mental Health: A report of the surgeon general* (SAMSHA/NIH 1999), *Achieving the Promise: Transforming Mental Health Care in America* (SAMSHA 2003), and the Institute of Medicine's *Crossing the Quality Chasm* (2001) as referenced in the AAMFT Core Competencies document, were also used in the creation of the competencies. Authors considered the impacts of historical, political, social, and economic contexts on clients, their relationships, and treatment processes. These competencies were created with the intent to "…improve the quality of services delivered by MFTs" (AAMFT 2004, p. 1) by outlining the very minimum competencies that a MFT must have. Therefore, when a professional identifies as a MFT, it is implied that he or she possesses basic competency in those areas. Currently, no core competency list exists for the practice of MedFT, leaving each training program to develop its own. Without a set of core competencies that is inter-institutional, those enrolled in varying MedFT degree or training programs may not have a shared skill set that can be evaluated in research or marketed in the workplace.

Method

The Delphi Method

The Delphi Method originated as a way for individuals with a particular shared knowledge and background to come together and discuss a topic related to their field of expertise without undue influence of one another (Dalkey 1972; Linstone and Turoff 1975). It is designed so that panelists act independently without direct confrontation by an interviewer typically through surveys (Dalkey and Helmer 1963). In this study, the Delphi technique was modified to include two phases of questionnaires in an effort to reduce panelist attrition (Stone Fish and Busby 2005). This modified format has also been utilized in other MFT-related Delphi studies (e.g., Godfrey et al. 2006; Jenkins 1996; Sori and Sprenkle 2004; Stone Fish and Osborn 1992; White and Russell 1995; White et al. 1997). Findings reported in this article are not representative of all of the results from the modified Delphi study that was conducted to identify the contemporary definition, scope, and practice of MedFT. The data reported here pertain to expert panelists' perspectives on MedFT training and fundamental core competences. This study was IRB approved in 2008.

Panelists

In order to meet the inclusion criteria for a Delphi study, one must have content expertise in the topic being surveyed (Dalkey 1972; Jenkins and Smith 1994; Linstone and Turoff 1975). As a result, panelists who consented to participate in this study were chosen purposively. Panelist criteria included one or more of the following: (a) self identification as a MedFT, (b) work in a clinical or academic setting as a MedFT, or (c) self identification as a healthcare provider who collaborates with a MedFT in his/her professional work.

Panelists were identified through a review of the academic literature and by reviewing the faculty and doctoral student listings for institutions of higher education offering MedFT academic courses or educational programs. Individuals were then contacted via email for confirmation that they met the inclusion criteria and asked for their willingness to participate. Potential panelists were also contacted by posting an email on the Collaborative Family Healthcare Association's (CFHA) membership listserv. CFHA was chosen as an appropriate listserve because it has historically been an outlet for scholarly work in MedFT.

Questionnaires were distributed in two phases. The first phase was completed by 37 panelists (21 females and 16 males), ranging in age from 26 to 63 (m = 41 years). In the second phase, three panelists were lost to attrition. The final sample included 34 of the original 37 panelists. Terminal degrees of panelists included Marriage and Family Therapy (43 %, n = 16), MedFT (30 %, n = 11), nursing or medical degrees (11 %, n = 4), and other areas (10 %, Theology, n = 1, Clinical Psychology, n = 1, Developmental Psychology, n = 1, Education, n = 1, and Family Studies, n = 2). Self-reported, formalized training in MedFT (e.g., degrees, certificate, institute, and internship/fellowship training), was indicated for majority of panelists (81 %, n = 30). Approximately 60 % of panelists identified themselves as faculty at an academic institution, while 16 % masters-level providers enrolled in doctoral programs. Panelists reported being employed in both medical and non-medical settings. For those employed in medical settings workload distribution was reported as the following: clinical (68 %), teaching (57 %), and research

(43 %). For panelists in a non-medical setting, workloads were similar: teaching (57 %), clinical (46 %), and research (41 %).

Data Collection and Analysis

As outlined above, data collection was done in two phases: Delphi Questionnaire I (DQ I) and Delphi Questionnaire II (DQ II). The DQ I included 8 open-ended questions and 12 demographic items. The findings from seven of the eight questions are presented in a separate publication (Tyndall et al. 2010). The question being addressed in this article is:

> What core courses, training and field experiences, and core competences (i.e., essential skills) do you believe MedFTs should have successfully completed as part of their MedFT curriculum? Indicate if courses should be taken at the MS or Ph.D. levels by inserting (MS) or (Ph.D.) after each course.

The statements rated in the DQ II were generated from panelists' responses to the DQ I. Wording of the statements was kept as closely to the original as possible. As is the purpose of the Delphi method, the researcher's role was to facilitate an asynchronous on-line conversation among experts (Dalkey 1972; Linstone and Turoff 1975) and then analyze the product of their participation.

Responses from the full eight questions in the DQI resulted in 600 statements. To help increase interrater reliability, three researchers assisted in the analysis process. Participant responses were read individually and each researcher noted his or her interpretation of its meaning. When clarification of a statement was needed, researchers followed up with panelists. This occurred three times. Researchers deleted redundant statements and then collapsed the remaining 552 statements into 17 distinct categories. Researchers randomly distributed the 552 statements from each of the 17 categories into two separate DQ II questionnaires in an effort to reduce the total number of statements to be answered and avoid panelist attrition. At times, due to the length of statements, panelists' responses were divided into shorter statements for ease of ratings in the DQ II questionnaire. The purpose of the DQ II was to take the initial series of statements (i.e., items) resulting from the DQ I and ask that participants rate their level of agreement with each item. The panelists were divided into two groups (DQ IIA, n = 19; DQ IIB, n = 18), based first on institutional affiliation and then randomly, in effort to provide a variety of opinions for each question. The final DQ IIA contained 278 items and the DQ IIB contained 274 items. Panelists rated their responses for each item on a seven point Likert scale, with seven indicating a strong level of agreement and one indicating a strong level of disagreement. There was a 92 % response rate on the DQ IIA and B combined with total of 34 of the 37 panelists responding.

Results

Consensus among panelists was determined by an analysis of the median and interquartile range of each survey item. The higher end of the Likert scale indicated the highest level of agreement, while the lower values of the scale indicated disagreement (Stone Fish and Busby 2005). The interquartile range (a measure of variability) indicates how much the panelists differed in their responses. An item that had both a high median and a small IQR indicated that a majority of panelists agreed with the statement. Items from the DQ IIA and DQ IIB with a median of six or higher (agree/strongly agree) and an IQR of 1.5 or less

Table 2 Academics/training statements included in MedFT profile

N = 175						
Courses (N = 100)	PhD	PM	MS	Competencies (N = 75)	PhD	PM	MS
Field training	12	4	6	Clinical skills	–	17	–
Physiology/pharmacology	2	5	3	Medical culture and collaboration	1	14	3
Systems/relational Theories	–	3	3	Treatment planning	1	1	1
Family and illness	5	2	8	Theoretical base	–	7	–
MedFT theory	3	1	1	Knowledge of health/relationships	–	4	–
Research/Stats	7	–	4	Knowledge of Diseases	–	4	–
Medical culture and collaboration	4	2	3	Teaching	–	4	–
MFT training	–	–	3	Evidence base	–	3	–
Ethics	–	–	4	Administration	–	3	–
Behavioral health theory	–	1	–	Self-care	–	2	–
Special topics	5	1	7	DSM knowledge	–	2	–
Health policy	1	–	–	Family systems knowledge	1	1	2
				BPSS/applied MedFT	3	1	–

Data reflect number of statements recognized in the final profile. PM statements reflect skills at the PM level minimally for those who did not study MedFT in their master's program curriculums. It is assumed that doctoral level programs build upon competencies and courses at the master's and post-master's levels

PhD doctoral level, *PM* post master's level, *MS* master's level

were included in the final profile. The final academics and training profile included 175 items (i.e., variables) which are grouped under the two larger thematic categories of courses and competencies (see Table 2). Also indicated in the table is the level at which each course and competency should be mastered. It is assumed that doctoral level programs build upon competencies and courses at the master's and post master's levels.

Courses

Panelists revealed that MedFTs should complete 12 course content and field work areas during their training. Panelists endorsed a total of 22 statements indicating a need for field training within medical settings. Three statements, two referencing training at the doctoral level and one referencing an unspecified level of training, reflected the highest possible score (median = 7; IQR = 0.0). These statements generally emphasized the need for supervised practical experience (e.g., a MedFT internship) in a medical setting, for example, "MedFTs should do internships in medical settings."

Research and statistics were viewed as important courses by panelists at both the master's and doctoral levels; however, more emphasis seemed to be given at the doctoral level with a higher number of statements endorsed (n = 7). Four such courses were endorsed at the master's level. Doctoral courses reflected a greater diversity and sophistication in terms of including entire courses on qualitative research, collaborative care research, and advanced statistics, while master's courses reflected a more basic and general research knowledge base.

Overall, the panelists approved 13 special topics courses that would serve to round out a MedFT's education. At both the master's and doctoral levels, panelists included courses on

sexuality, gender and diversity, and death and dying. At the doctoral level they recommended a course that addressed medical disparities. At the master's level, they identified courses related to community resources and crisis assessment. Substance abuse was included at both the master's and the post master's levels.

Twelve of the course content areas approved by the panel focused on the theoretical underpinnings of MedFT. Panelists endorsed MedFT theory at all three levels (n = 5). Specifically, at the doctoral level, panelists gave the highest rating to a course entitled, *Advanced Medical Family Therapy*. Systems, relational theories, behavioral health, and the BPS-S were only mentioned at the master's (n = 3) and post master's levels (n = 4). This led us to assume that at the doctoral level, a MedFT would have already received training in these theories. At the master's level, also receiving the highest rating was the statement "MedFTs at the Master's level should have a course in Family Therapy Theory." Health policy theory (n = 1) was endorsed as a course at the doctoral level only.

The panelists identified ethics courses (n = 4) as important at the master's level of study: two general ethics, one working within a medical setting, and one research ethics. The researchers interpreted panelists' recommendations as the need for students to have completed ethics course prior to enrolling in doctoral level courses. No statements in this category received the highest score (median = 7; IQR of 0.0).

As a content area, panelists reached consensus that MedFTs at all three levels should take general courses on families and illness (n = 15). Examples of those course titles included: *Advanced families, illness, and disabilities*, *Chronic illness and families*, and *Illness across the lifecyle*. A statement at the post master's level reflected the general necessity of a course on health and families received the highest level of endorsement "MedFTs should take courses in health and families" (median = 7; IQR = 0.0).

The presence of courses on marriage and family therapy (MFT) was indicated at the master's level only. In this content area, panelists strongly agreed with three statements that a MedFT must have training in MFT. With a strong knowledge base in MFT, the panelists' statements also reflected the importance of the inclusion of courses more medical in nature. The statement that reflected that inclusion received the highest possible score (median = 7, IQR 0.0) was: "MedFTs should have all the training one would get to be a family therapist, and then additional courses/training in appropriate medical issues and the related BPS issues that individuals/families face."

The panelists endorsed courses on human physiology and pharmacology at all three levels (n = 10). Panelists suggested a basic level for these courses that provides MedFTs with a foundation from which they can collaborate with medical providers. An example of the endorsed courses included: "Psychopharmacology (basic knowledge of how drugs that treat physical illness can affect mental health and vice versa)." Panelists indicated that these courses were important for collaboration with physicians, "Ideally, MedFTs should take some kind of course in the brain and mental illness so that one can converse well with physicians."

The final content area, medical culture and collaboration, included courses that would be essential to the successful function of MedFTs in a medical system (n = 9). The courses endorsed by the panelists addressed the importance of learning how to collaborate with medical professionals and work within the medical system effectively. Two statements at the doctoral level received the strongest endorsement (median = 7; IQR = 0.0). These statements focused heavily on collaboration: "Collaborating in medical settings" and "Advanced collaborative care with physicians including understanding and skills of relating with them."

Competencies

Panelists were asked to address the competencies that MedFTs should have at the master's, post master's, and doctoral levels.

Beginning with clinical competencies, the largest content area of competencies was medical culture and collaboration. While there were 18 statements where consensus was reached, 6 reflected the strongest possible findings (median = 7; IQR = 0.0). These six statements included the following: the ability to communicate with providers (n = 2), act as a facilitator between providers and patients and their families (n = 1), and maintain an awareness of the cultural differences within a medical environment as compared to a traditional therapy setting (n = 3).

Regarding clinical care or therapy skills, panelists endorsed 17 statements related to MedFTs' clinical competencies with patients and their families. The statements that received the highest possible agreement (median = 7; IQR = 0.0) reflected being skilled at systemic therapy, integrated care, empowering patients, general family therapy skills, and being culturally competent. Closely related to clinical skills was treatment planning (n = 3), which was also identified by the panelists as a necessary competency for preparing MedFTs at all three levels of training.

Panelists agreed that the knowledge about family therapy and family systems was critical as a base at the master's, post master's, and doctoral levels (n = 4). With family therapy established as its base, panelists agreed on four statements related to competency in advanced, applied MedFT that built on the family systems knowledge (n = 4). Of these four statements, the statements that received the strongest agreement among panelists included those related to levels of collaboration, coordinated/integrated delivery systems/services, and the overlap of medical and mental health problems. e.g., "MedFTs should have competency in advanced application of family systems concepts developmentally to acute, chronic, and terminal illness" (median = 7; IQR = 0.0).

Additional fundamental competencies at the post master's level included training in health and relationships (n = 4), including knowledge of common diseases (n = 4), as well as proficiency in using the *DSM-IV-TR* (n = 2). Theoretical competencies (n = 7) at the post master's level that were also included in the final profile included systems theory, the biopsychosocial-spiritual model, the three-world view ("clinical, operational, financial"), and the concepts of agency and communion. Panelists also reached consensus on the idea that being competent as a MedFT included being informed and knowledgeable about medical, psychological, social, and spiritual research (n = 3), for example, "MedFTs should know the research on interventions with health problems and with psychiatric problems." They approved four statements reflecting the importance of MedFTs' ability to educate others about MedFT and capability to teach systems theory and the BPS-S model, e.g., "MedFTs should have strong abilities to teach BPSS."

Lastly, panelists indicated that MedFTs should be competent in self-care (n = 2). These two statements were strongly endorsed and reflected that MedFTs should make an effort to avoid burnout and also be aware of their own self-of-provider issues. MedFTs were held accountable to the administrative and business side of healthcare as well with the inclusion of three statements reflecting the implementation of an integrated care practice, creating a niche for one's MedFT services within a healthcare system, and being skilled in conducting a marketing analysis for MedFT opportunities.

Discussion

The purpose of this article was to provide results extracted from a larger Delphi study (Tyndall et al. 2010) focusing specifically on MedFT core competencies and curriculum for training. Previous published articles have focused on the availability (Brucker et al. 2005) and development of internship sites (Grauf-Grounds and Sellers 2006), as well as specific skills needed to supervise students in medical settings (Edwards and Patterson 2006). Others have provided insight into the quality of training that can happen in a collaborative context (Gawinski et al. 1999; Harkness and Nofziger 1998). MedFT training has grown from one summer institute in its early years (URMC 2012) to ten training programs currently. With the expansion of training programs, there is a great need to establish a foundational curriculum base and there has yet to be an effort to elucidate core courses or survey experts in MedFT nationally to help identify core competencies. Students who graduate from a MedFT training institute or program may vary in their core training, theories, and practicum experiences. While it is not known if a MedFT who received his/her training in an intense workshop or graduate degree program is any more or less effective, agreement on competencies and curriculum would give credibility and fidelity to the practice of MedFT.

Competencies

Participants in this study revealed that to be an effective collaborator, MedFTs must be comfortable educating themselves and be well versed in other disciplines' research and literature. When interacting in a clinical position, MedFTs should be current on relevant research, not only from the social sciences perspective, but also from the perspective of other healthcare professions. In fact, panelists agreed that MedFT programs should include basic human physiology and pharmacology in the curriculum, two areas not generally addressed in master's level mental health curriculum. Additionally, MedFT core competencies included medical knowledge and collaboration, but also hold MedFTs accountable for competencies ranging from general therapy skills to self-care and implementing an integrated care business plan.

Panelists agreed that advanced training in MedFT (e.g., degree granting programs, extensive coursework, and field application) is critical in the development of becoming a MedFT at the master's, post master's, and doctoral levels. While those holding licensure in other mental health and medical fields may become trained in MedFT, panelists also agreed about the clear need for a solid foundation of knowledge and skills in marriage and family therapy theories, interventions, and research.

Panelists overwhelmingly agreed on the inclusion of a biopsychosocial and spiritual (BPS-S) perspective and systems theory as theoretical underpinnings of MedFT. McDaniel et al. (1992) first described MedFT as practiced by therapists who specialized in integrating BPS and systems theory perspectives. This initial definition and the focus of MedFT has evolved to include the spiritual dimension (Hodgson et al. 2007; Katerndahl 2008; Onarecker and Sterling 1995). While at times it seemed that BPS and BPS-S were used interchangeably throughout panelists' statements, the spiritual component was included more often than it was left out. This frequent inclusion of spirituality within the BPS perspective suggests that trainers, clinicians, and supervisors should address spirituality in their curriculum.

Based on the outcomes of this study, the faculty members at ECU have adopted a set of 26 MedFT competencies and extend it as an example of how to apply these findings (see "Appendix"). In the context of ECU's program, these competencies are applied at the

doctoral level and aligned with advanced educational/student learning outcomes. However, in the current study, a majority of the competencies recognized by the panelists were at a post master's level. In fact, if a competency was indicated at either a doctoral or master's level, it was also indicated at a post master's level and the difference seemed to be beginner versus advanced. These evidenced based competencies are offered for consideration of other programs to adopt in an effort to unify training.

Limitations

As is true with all studies, this study had its limitations. This article only examined a portion of the results and the overall survey included eight questions in the first survey which led to over 500 items for the second survey. As a result, even when divided into two surveys, the second one was very lengthy and may have led panelists to tire and answer quickly toward the end. Delphi studies are generally used to provide broad suggestions rather than specifics (Godfrey et al. 2006); this study simply scratches the surface and helps lead MedFT in a general direction. Lastly, due to the nature of a Delphi study, the sample is purposive. However, only 19 % of the 37 panelists have terminal degrees from fields other than MFT and MedFT and 14 % of the panelists were senior level doctoral students. While these doctoral students were considered to have expertise in MedFT by their immersion in the current literature through their studies and clinical experiences, it should also be noted that they were largely from the same institution. As a result, the panelists were very similar in their educational backgrounds possibly leading to a lack of professional diversity.

Summary

Until now, MedFT training programs have been operating and creating curriculum based largely on educated assumptions regarding the important elements of MedFT. While those programs have had fundamental aspects in common, this work provides for them a cornerstone template for programmatic growth. Working from this template will assist MedFT clinicians, academicians and researchers in their development of field-based training, curriculum, and MedFT effectiveness and efficacy studies.

Appendix

See Table 3.

Table 3 East Carolina University—Medical Family Therapy Competencie

1. Develop sufficient understanding of the relevant biomedical issues, language, culture, and providers in primary, secondary, and tertiary healthcare systems.
2. Apply MFT evidence based models to medical family therapy cases.
3. Demonstrate skills in helping families manage the demands of acute and chronic illness.
4. Demonstrate skills in providing integrated care.
5. MedFTs should have a personal theoretical approach to working with individuals, couples, families, and larger systems.

Table 3 continued

6. Demonstrate the ability to empower patients to advocate for themselves in the healthcare system.

7. Demonstrate ability to motivate health-related behavior change.

8. Demonstrate awareness of and sensitivity to cultural and contextual variables pertaining to health, illness, loss, and trauma.

9. Recognize the various disciplines involved with medical care and their role in the healthcare environment.

10. Facilitate communication between patients, families, and health care providers and invite coordination of services.

11. Demonstrate the ability to refer, document, and communicate with healthcare professionals.

12. Understand the ethical issues of delivering mental health care within a healthcare system.

13. Understand and apply the concepts of agency and communion.

14. Understand the clinical, operational, and financial elements of healthcare systems.

15. Understand the key historical figures, theoretical underpinnings, and empirical literature central to MedFT.

16. Understand the bidirectional relationship between health and wellness on mental health functioning.

17. Understand psychopharmacology and its systemic effects.

18. Understand disease processes and developmentally appropriate treatments.

19. Articulate clearly the difference between MedFT and other mental health professionals.

20. Apply systems theory and the biopsychosocial-spiritual approach to research, education, clinical, supervision, and/or consultation services.

21. Evaluate and design intervention and program research associated with biopsychosocial-spiritual health issues and collaborative care models.*

22. Demonstrate the ability to conduct a BPSS assessment.

23. Understand the impact of one's family illness stories, self-of-provider issues, and biases in relation to care delivery.

24. Recognize the importance of self care and understand how to avoid burnout and compassion fatigue.

25. Integrate BPSS elements into treatment plans and other clinical documents.

26. Evidence skills in designing and building transdisciplinary collaborative care teams.

* Suggested as a doctoral level competency only. All other competencies, based on the results of this study, are applicable across training levels (i.e., master's, post-master's, and doctoral) and executed at varying degrees of difficulty (i.e., beginner, intermediate, and advanced)

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