An investigation of emotional intelligence factors among medical affairs professionals dealing with oncology solid tumors for effective relationship management by means of factor analysis

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Keywords
Emotional intelligence, Medical Affairs, Oncology, Solid tumors, Relationship management

Abstract
Recently there was headline in Wall street journal, 2018 stating close to 400 healthcare professionals a year are committing suicide. This headline is alarming and should get the immediate attention understanding the reasons for the suicides and then by means of creating support interventions to help healthcare professionals. It has been proved by research that following are 3 top reasons affecting mental and thus physical health of health care professionals: burnout, pressure and underdeveloped emotional intelligence. The burnout has an impact on around 40 percent of health care professionals in oncology field; pressure has impact on 31 percent of healthcare professionals in oncology field and 23 percent of health Care professionals approximately are facing issues due to underdeveloped emotional intelligence. This research paper focuses on investigating the Emotional intelligence factors among Medical Affairs Professionals Dealing with Oncology Solid Tumors for effective relationship management by means of using multivariate statistical tool factor analysis.

For the purpose of primary data collection questionnaire was circulated to 100 medical affairs professionals from Mumbai banking using convenience sampling technique. The findings suggest that self-awareness, self-management, perspective taking, seeking feedback, caring, trustworthiness, conflict handling, building relationships, learning agility and organizational understanding are the important emotional intelligence factors among Medical Affairs Professionals Dealing with Oncology Solid Tumors for effective relationship management.

Introduction
There is a global epidemic. Recently there was headline in Wall street journal, 2018 stating close to 400 healthcare professionals a year are committing suicide. This headline is alarming and should get the immediate attention understanding the reasons for the suicides and then by means of creating support interventions to help healthcare professionals. It has been proved by research that following are 3 top reasons affecting mental and thus physical health of health care professionals: burnout, pressure and underdeveloped emotional intelligence. The burnout has an impact on around 40 percent of health care professionals in oncology field; pressure has impact on 31 percent of healthcare professionals in oncology field and 23 percent of health Care professionals approximately are facing issues due to underdeveloped emotional intelligence.

Medical affairs professionals must be able to grasp the fundamental dynamics and gradations within an organization and between its people; hence effective relationship management is one of the core competencies of the medical affairs professionals. They should be able to act as influential advocates for their activities with fellow teammates inside the company and be proficient at maintaining interaction with a growing array of external stakeholders through several networks including personal, conferences and social media (Brindan et.al, 2013; Howe et.al, 2012).

This research paper focuses on investigating the Emotional intelligence factors among Medical Affairs Professionals Dealing with Oncology Solid Tumors for effective relationship management by means of using multivariate statistical tool factor analysis. Relationship management means being self-
aware, manage self, being aware of the situations and people in those situations so that cordial productive relationships are maintained for longer term which is one of the core competencies required by medical affairs professionals.

For the purpose of primary data collection questionnaire was circulated to 100 medical affairs professionals from Mumbai banking using convenience sampling technique. The findings suggest that self-awareness, self-management, perspective taking, seeking feedback, caring, trustworthiness, conflict handling, building relationships, learning agility and organizational understanding are the important emotional intelligence factors among Medical Affairs Professionals Dealing with Oncology Solid Tumors for effective relationship management which after factor analysis are integrated into 3 skills namely Social and learning skills, Self-regulation and rapport building skills and Inventory taking and Assessment skills.

Literature review

There is in-depth research carried out in the domain of emotional intelligence importance among healthcare professionals and on its multifarious aspects, but limited researches are targeted on investigation of Emotional intelligence factors among Medical Affairs Professionals Dealing with Oncology Solid Tumors for effective relationship management.

Medical affairs professionals and need of emotional intelligence

There is a global epidemic. Recently there was headline in Wall street journal, 2018 stating close to 400 healthcare professionals a year are committing suicide. This headline is alarming and should get the immediate attention understanding the reasons for the suicides and then by means of creating support interventions to help healthcare professionals. It has been proved by research that following are 3 top reasons affecting mental and thus physical health of health care professionals: burnout, pressure and underdeveloped emotional intelligence.

Burnout: on an average 40 percent among the oncologist be it medical, surgical or radiation. According to National Academy of Medicine health care professionals exhibited signs of burnout, a syndrome marked by “a high degree of emotional exhaustion...and a low sense of personal accomplishment.”

Pressure: Health care professionals are making life and death decisions all day long. There is lot of stress where vital decisions have to made in the moment. A mistake can mean death. In most professions, a mistake doesn’t have these severe consequences. Medical affairs professionals have to deal with different stakeholders throughout their job profile like regulatory authorities, doctors their own team members, agents, patients and many more. Effective and accurate communication with these individuals is also one of the major factors leading to stress among health care professionals.

Underdeveloped EI: To get into good school and then esteemed college, students have to focus on their cognitive development, such as memorizing, studying causes and effects, and building associative skills and are surrounded by books and laboratory test and clinical trials. There isn’t also the time or focus on emotional development such as self-awareness, knowing their own patterns and triggers, emotional regulation, managing difficult conversations and building their empathy. And suddenly medical affairs professionals have to deal with different stakeholders throughout their job profile like regulatory authorities, doctors their own team members, agents, patients and many more. Effective and accurate communication with these individuals is also one of the major factors leading to stress among health care professionals.

Emotional Intelligence training and coaching can help physicians address these areas with focus on self-emotional appraisals.

There are many models and definitions for Emotional Intelligence. However, in a simple language “Emotional Intelligence is to think, feel and behave intelligently when one is emotional”

“Emotional Intelligence Sets Apart Good and Effective healthcare professionals”*. A study of 2,800 physician “star performers” showed that 75 percent of a high-achiever’s success is a function of emotional intelligence; only 25 percent of success reflects technical competency (El-Aswad, Nadler, Ghossoub, 2017).
Salovey and Mayer coined the term "emotional intelligence" in 1990 (Salovey and Mayer, 1990). They were cognizant of the preceding studies on non-cognitive parameters of intelligence and they described emotional intelligence as "a form of social intelligence that involves the ability to monitor one's own and others' feelings and emotions, to discriminate among them, and to use this information to guide one's thinking and action" (Salovey and Mayer, 1990). Emotional intelligence can be seen to be a prerequisite for cultural intelligence.

**Emotional intelligence has 4 important dimensions (Goleman, 1998)**

- **Self-awareness:** Self-awareness includes awareness of the individual with regards to his/her strengths, weaknesses, opportunities and challenges. Self-awareness means knowing self, being aware, it takes practice to observe ourselves and once we recognize our emotional state, we can bring about changes to suit situations.
- **Self-management:** Once an individual becomes aware of the emotions, it's essential to check the impact of these emotions on mental and physical health. Then individual can streamline negative emotions into a productive manner for benefit of self and others. This is self-management that is how one deals with the emotions – acknowledge, express gratitude for positive emotions and express and vent out the negative emotions in a guilt-free manner. Self-management deals with appreciating positive emotions and managing negative emotions (Staw, 1994; Salovey, 1990; Gorman et al., 2005; Anderson, 2000).
- **Social awareness:** Social awareness is awareness that an individual’s behavior has influence on surrounding situation, individuals and the climate. It includes awareness of the other individuals, teams with recognition and respect of their emotions and feelings.
- **Relationship management:** Relationship management means being self-aware, manage self, being aware of the situations and people in those situations so that cordial productive relationships are maintained for a longer term (Hudak et al., 2000, Arora et al., 2010). Once an individual practices self-awareness, self-management, social awareness, relationship management (Naik, 2018) becomes easier to practice which is an essential aspect for achievement of goals and objectives of the organization leading to increase profitability.

**Research Objectives**

The primary objective of this research paper is to examine the literature related to medical affairs professionals and emotional intelligence. The next objective is to investigate the emotional intelligence factors among medical affairs professionals dealing with oncology solid tumors for effective relationship management (Donavan et al., 2004; Berry et al., 2007).

**Research Methodology**

The research design focuses on quantitative research study by means of using statistical analysis tool factor analysis to determine important emotional intelligence factors among Medical Affairs Professionals Dealing with Oncology Solid Tumors for effective relationship management. (Creswell, 1994). In this study use is made of questionnaire and informal interviews, for gathering the primary data and secondary data is gathered by means of published and unpublished paper and electronic sources like journals, newspaper, articles etc (Naik et al., 2017). For the purpose of primary data collection questionnaire was circulated to 100 medical affairs professionals from Mumbai banking using convenience sampling technique. For the research under study the tool used for data analysis was factor analysis. The cronbach α value is within permissible limits to carry factor analysis.

H<sub>0</sub>: There is no internal consistency and reliability among the variables selected in the study for conducting factor analysis focusing on important emotional intelligence factors among Medical Affairs Professionals Dealing with Oncology Solid Tumors for effective relationship management.

H<sub>1</sub>: There is an internal consistency and reliability among the variables selected in the study for conducting factor analysis focusing on important emotional intelligence factors among Medical Affairs Professionals Dealing with Oncology Solid Tumors for effective relationship management.
After discussion with the medical affairs professionals and the literature review, following parameters are considered as important with respect to emotional intelligence for effective relationship management:

- Self-awareness
- Self-management
- Perspective taking
- Seeking feedback
- Caring
- Trustworthiness
- Conflict handling
- Building relationships
- Learning agility
- Organizational understanding

**Data Analysis**

Multivariate statistical analysis tool factor analysis is used to determine emotional intelligence factors (Brindan et al., 2013).

<table>
<thead>
<tr>
<th>Component</th>
<th>Initial Eigenvalues</th>
<th>Rotation Sums of Squared Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>% of Variance</td>
</tr>
<tr>
<td>1</td>
<td>3.841</td>
<td>38.408</td>
</tr>
<tr>
<td>2</td>
<td>2.043</td>
<td>20.427</td>
</tr>
<tr>
<td>3</td>
<td>1.248</td>
<td>12.480</td>
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<tr>
<td>4</td>
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</tr>
<tr>
<td>6</td>
<td>.580</td>
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<tr>
<td>7</td>
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<td>.150</td>
<td>1.502</td>
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<tr>
<td>10</td>
<td>.115</td>
<td>1.149</td>
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</table>

Extraction Method: Principal Component Analysis.

Table 1. Total Variance Explained

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<tr>
<th>Component</th>
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<tr>
<td>SA</td>
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<td>- .032</td>
<td>.763</td>
</tr>
<tr>
<td>SM</td>
<td>.002</td>
<td>.876</td>
<td>.076</td>
</tr>
<tr>
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<td>.753</td>
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<td>.272</td>
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<td>.458</td>
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<td>BR</td>
<td>.906</td>
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<td>.208</td>
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<td>.113</td>
<td>.109</td>
</tr>
<tr>
<td>OU</td>
<td>.878</td>
<td>.086</td>
<td>.218</td>
</tr>
</tbody>
</table>

Extraction Method: Principal Component Analysis.
a. 3 components extracted

Table 2 Rotated Component Matrix
Based on the table 2, the following graph which is called as Scree Plot is plotted to know the number of factors which is available in the analysis.

Graph 1. Scree Plot

From the above graph of Scree plot 1, it can be concluded that the factors having the Eigen values more than 1 have to be considered. This study determines 3 factors.

Interpretation (From Table 2)
From the Table 2 of Component Matrix, it can be seen that the following factors can be classified as follows:

Factor 1
Conflict handling
Building relationships
Learning agility
Organizational understanding
Factor 1 can be renamed as Social and learning skills

Factor 2
Self-management
Seeking feedback
Caring
Trustworthiness
Factor 2 can be renamed as Self-regulation and rapport building skills

Factor 3
Self-awareness
Perspective taking
Factor 3 can be renamed as Inventory taking and Assessment skills

With the results of the statistical analysis, coupled with the formal and informal discussions with the medical affairs professionals from Mumbai it is concluded that Social and learning skills comprising of conflict handling, building relationships, learning agility and organizational understanding; Self-regulation and rapport building skills comprising of self-management, seeking feedback, caring, trustworthiness and Inventory taking and Assessment skills comprising of self-awareness, and perspective taking are the important emotional intelligence factors among Medical Affairs Professionals Dealing with Oncology Solid Tumors for effective relationship management. Medical affairs professionals especially in oncology field do not only relate to stakeholders like their own team, physicians and patients at professional level. The major part of their job also involves handling the emotional responses of these stakeholders like anger, fear, depression and so it is essential that they get a training in self-emotional appraisals with regards to the above mentioned emotional intelligence factors (Scott, 2002; Budhwar et.al, 2009; Hubert, 2016).
Findings and Discussions

This research paper investigated that Social and learning skills comprising of conflict handling, building relationships, learning agility and organizational understanding; Self-regulation and rapport building skills comprising of self-management, seeking feedback, caring, trustworthiness and Inventory taking and Assessment skills comprising of self-awareness, and perspective taking are the important emotional intelligence factors among Medical Affairs Professionals Dealing with Oncology for effective relationship management.

Self-awareness means knowing self, being aware, it takes practice to observe ourselves and once we recognize our emotional state, we can bring about changes to suit situations. Self-management deals with regulating the emotions for effective decision making. Perspective taking is where team members see each other make efforts to grapple with perspective leading to building an environment of trust among the team. Seeking feedback involves learning the art of taking and giving feedback to all the stakeholders in a constructive manner (Petrides, 2007; Kanwar et.al, 2009; Cherniss, 2000). Caring includes providing emotional support to team, if genuinely required volunteering for help, let members know they are valued and such other acts. Trustworthiness includes take time away from group tasks to develop emotional bonds with each other leading to creation of environment of trust. Conflict handling includes using playful devices and ground rules to correct errant behavior. Building relationships focuses on appreciating a team member in front of all and telling the mistake in isolation with a plan to improve (Vanesse and Steven, 2001). Learning agility includes the ability to keep on learning and infer accurately from what the individual already knows. Organizational understanding includes being able to create networks and relations along with awareness of the entire commercialization process and wider marketplace dynamics (Brindan et.al, 2013) so that medical affairs professionals can deal with other business leaders on an identical footing. So, these 10 factors are integrated by means of factor analysis into 3 important components:

- Social and learning skills: focusing on relationship management and knowledge and learning values of the respondents
- Self-regulation and rapport building skills: focusing on creating a collaborative environment within self as well with others for the respondents
- Inventory taking and assessment skills: essential for knowledge of self and others for the respondents

So, these 3 components can be seen to be interlinked and essential for holistic relationship management of medical affairs professionals with self and others.

Limitations

The current study is limited as generalization of the result is difficult as data is collected only from medical affairs professionals from Mumbai. The confidentiality with respect to names of organizations selected and respondents from whom data is obtained is also a limitation as the organizations and respondents requested for the confidentiality.

Scope of the Research

The scope of the future research is to devise a proposed training model integrating the all the emotional intelligence factors which are essential for effective relationship management and test the same by means of appropriate statistical tool. The longitudinal time series studies can also be conducted to check the practical implementation of the training model in other health care professions also (Anderson, 2000; Conte, 2005).

Conclusion

Emotional intelligence in the health care space is important for the effective relationship management with various stakeholders. Medical affairs professionals especially in oncology field do not only relate to stakeholders like their own team, physicians and patients at professional level. The major part of their job also involves handling the emotional responses of these stakeholders like anger, fear, depression and so it is essential that they get a training in self-emotional appraisals. With the results of the statistical analysis, coupled with the formal and informal discussions with the medical affairs professionals from Mumbai it is concluded that Social and learning skills comprising of conflict handling,
building relationships, learning agility and organizational understanding; Self-regulation and rapport building skills comprising of self-management, seeking feedback, caring, trustworthiness and Inventory taking and Assessment skills comprising of self-awareness, and perspective taking are the important emotional intelligence factors among Medical Affairs Professionals Dealing with Oncology (Salovey & Mayer, 1990; Goleman, 1998). These factors will enable the medical health professions to regulate self-first, understand the importance of effective relationship maintenance and then can attract others into a compelling vision of a common future by being able to manage relationships with them in a productive manner.

References
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