Research affirms the impact of Tibb Lifestyle in Health Promotion and Illness Management measured in terms of Quality of Life parameters

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Key words: Tibb Lifestyle Factors; Health Promotion; Illness Management; Chronic Disorders; Quality of Life

Executive summary

After the successful training of more than 2000 Community Healthcare Workers/Ward Based Outreach Teams (WBOT's), and Health Promoters from the 126 clinics in the City of Johannesburg as Tibb Lifestyle Advisors, a research project under the banner of Care and Support for Improved Patient Outcomes (CaSIPO) was initiated by the Ibn Sina Institute of Tibb and the Allied Communities Network.

The methodology in the research was developing and monitoring the impact of a Customized Lifestyle Factors Management Care Plan, on the role of the Tibb Lifestyle Factors in a) improving/promoting health of 120 'well' clients based on their temperament, measured in Quality of Life (QoL) parameters – Health Promotion group; and b) measuring QoL parameters in 480 patients with pre-diagnosed illnesses – Illness Management group, over a one-year period.

Of the 120 participants in the Health Promotion group 88 (73%) were female and with 97 (81%). aged 40 or below. Of the 480 participants in the Illness Management group 375 (78%) were females, with 74% above the age of 40.

Of the clients in the Health Promotion group, 116 (97%) reported positive results, ranging from +1 to +15, totalling 759 positive responses. Of the remaining 4 clients, the first client reported -3 in some categories and +1 in one category (i.e. -3; +1 = **-2**). The second and third client, both reported -1 in one category and +7 in the other categories (i.e. -1; +7 = **+6**), adding up to +6 +6 = **+12**, whereas the fourth client reported no change – overall positives of 759 –2 +12 = 769. The average positive per client was 769/120 clients, equivalent to 6.40 positives.

Of the clients in the Illness Management group, 469 (97%) reported positive results, ranging from +1 to +26, which totalled 4231 positive responses. Of the remaining 11 clients, 2 clients reported no change, whereas 7 patients showed overall positive responses of (i.e. +9/-1 = **+8**; +7/-1 = **+6**; +7/-1 = **+6**; +5/-3 = **+2;** +10/-1 = **+9**; +5/-1 = **+4**; +9/-1= **+8**). One client reported an overall -1 (i.e. +1/-2 = **-1**), another client showed an overall of -17 – overall positives of 480 clients = 4231 + 8 +6 +6 +2 +9 +4 +8; -1 -17 = 4250. The average positive per client was 4250/480 clients equals 8.85 positives.

The results of the average positive per client in the Health Promotion group of 6.4 as compared to the average positive per patient in the illness management group of 8.85 suggests that whilst there is a definite positive impact of the Tibb Lifestyle Factors in both groups, understandably the positives will be higher in the Illness Management group as the clients in the Health Promotion group are 'well', health-wise, without any chronic disorders. The results are impressive and bear testimony to the targeted approach, of Tibb Lifestyle Factors based on the Tibb principles of Physis, Temperament, and Qualities.

This pilot research project provided meaningful positive results on the effect of lifestyle intervention by Tibb Lifestyle Advisors on the Quality of Life experienced by the target investigated groups - more specifically in patients with chronic illnesses. The extension of the Tibb Lifestyle Advisors programme over the next twelve months to more than 40000 patients attending the 126 clinics should further demonstrate the impact of the Tibb Lifestyle Factors in the management of pre-diagnosed illnesses, especially the chronic diseases of lifestyle such as hypertension, diabetes, HIV & AIDS.

The City of Johannesburg support of the Tibb Lifestyle Advisors Programme indicates that they see the need for integrated interventions focused on a common goal - *better health for all*.

1. Introduction

The Tibb Lifestyle Advisors Programme, has been successfully implemented, since 2015. More than 2000 Community Healthcare Workers/Ward Based Outreach Teams (WBOT's), and Health Promoters from the 126 clinics in the City of Johannesburg were trained as Tibb Lifestyle Advisors. A research project under the banner of Care and Support for Improved Patient Outcomes (CaSIPO) was initiated by the Ibn Sina Institute of Tibb together with the Allied Communities Network to measure the impact of the Tibb Lifestyle Factors in Health Promotion, and in the Management of Chronic Diseases of Lifestyle, measured in terms of Quality of Life parameters.

2. Lifestyle in health and illness

Until quite recently the potential of lifestyle changes in the healthcare scenario was not really appreciated. More and more research confirms the beneficial effect that changes in a person's breathing technique, food intake, sleep hygiene, and personal habits can bring about. By adopting a more pragmatic and harmonious lifestyle in a number of behavioural dimensions, the immune system and other healing mechanisms are supported, protected, and even stimulated. This clearly results in a healthier way of living. This benefits not only the individual, but his family, community, employer, and ultimately the nation in general. It also has a beneficial effect on the person's self-esteem as he or she becomes actively involved in their healthcare and maintenance. In effect, they become empowered in a very important aspect of their daily life.

In Western medicine lifestyle advice has a 'one size fits all' approach: counsel on diet, exercise, smoking, etc.; is limited and generally half-heated. Tibb truly understands the role that lifestyle occupies in keeping us healthy, and if not managed correctly will contribute to the onset of disease. In Tibb the role of lifestyle in health promotion and in the management of illnesses especially chronic is individualised, resulting in a better Quality of Life (QoL).

The benefits of lifestyle changes are many: they are available to all, easy and inexpensive to apply, can be achieved by virtually everyone, are well tolerated when undertaken properly, do not need continuous expert guidance, and are safe for people of all ages. What's more, if adopted early enough, lifestyle changes can delay the onset of many chronic diseases, or prevent them from forming in the first place.

3. Tibb Principles that underpin the research

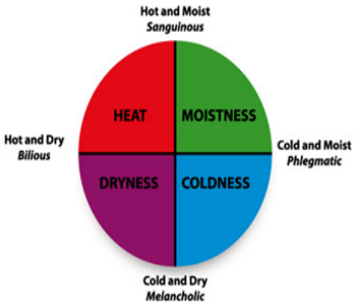
The Tibb principles that underpin the research include the Tibb Lifestyle Factors, Physis, Temperament and Qualities. They are important in understanding the causes of many, if not most, chronic and recurring illnesses, and in promoting optimum health.

Tibb Lifestyle Factors: Tibb has identified Six Lifestyle Factors which affect every individual. These include Environmental Air and Breathing; Food and Drink; Sleep and Wakefulness; Movement and Rest; Emotions and Feelings; Elimination. Each of these Lifestyle Factors has a qualitative effect on an individual: For example, the weather is either Hot or Cold, foods such ginger are heating, physical exercise produces heat, whereas sleep is cooling.

Physis: Is the intrinsic ability of the body to preserve health, and the mechanism that activates the body's healing processes. Tibb recognizes that every person's body tries to heal itself. In Tibb we say that each of us has a doctor within called Physis. For example, if someone eats something that doesn't agree with them, vomiting and diarrhoea are signs of Physis working to eliminate the toxins and so protect the person.

Temperament: Is a combination of a person's physical, mental, and emotional characteristics, which not only describes that uniqueness, but also his/her predisposition to illness. Tibb recognises that no two people are alike, lifestyle advice has to be individualised for health promotion to suit an individual's temperament. Tibb divides

people into one of four broad categories: Sanguinous, Phlegmatic, Melancholic, and Bilious, with a dominant and sub-dominant temperament. Each temperament has qualities of heat, coldness, moistness, and dryness, with every combination having an overall dominant quality. The illustration adjacent describes temperament and qualities and shows that a person with a combination of a Sanguinous and Bilious temperament has an overall dominant quality of heat, less of moistness and dryness and the least amount of coldness. Similarly, the Phlegmatic/Melancholic temperament has an overall dominant quality of coldness, less of moistness and dryness and the least amount of heat. Changes to these overall qualities, especially an increase in the dominant quality associated with a person, negatively affect this person.



Qualities: In Tibb, the qualities of hot, cold, moist and dry, common to temperament, and Lifestyle Factors, are also associated with illness. For example, the qualities associated with colds and flu's are coldness and moistness, which is easy to understand as we know that these symptoms appear mostly in winter. Similarly, osteoarthritis (qualities of cold and dry) gets worse in winter. Qualities provide the basis for interpreting the application of Lifestyle Factors in Health Promotion and Illness Management.

In health promotion: As Tibb is able to identify the dominant quality associated with a person, and Individualised Lifestyle Factors Management Care Plan, can be designed to regulate the Six Lifestyle Factors, ensuring that the ideal quality that suits an individual's temperament is maintained, so promoting good health.

In the management of illness: The Six Lifestyle Factors can be individualised in a Lifestyle Factors Management Care Plan that opposes the qualities associated with the illness. For example, for a patient suffering from a cold or flu, the Lifestyle Factors Management Care Plans includes consuming ginger, hot chicken soup, for example, to counter the cold and moist qualities associated with the cold and flu with heat and dryness. With this approach Tibb addresses not only the symptoms but also the causes of the illness.

4. Quality of Life

Most people understand Quality of Life (QoL) to be an objective measure of life as they are presently experiencing. Generally, QoL is taken to measure the physical, mental, and emotional dimensions of someone's daily living. A QoL assessment may include general health, the degree of physical, emotional and cognitive functioning they are experiencing, their psychological state, their social well-being, as well as the severity of symptoms associated with illnesses, where applicable.

5. Study design

5.1 Main objectives

The research has two main objectives:

a) To develop and monitor the impact of a Customized Lifestyle Factors Management Care Plan/Case Studies incorporating the Six Tibb Lifestyle Factors in health promotion of 120 clients based on their temperament, measured in terms of Quality of Life parameters - the Health Promotion Group.

b) To develop and monitor the impact of a Customized Lifestyle Factors Management Care Plan/Case Studies incorporating the Six Tibb Lifestyle Factors in the management of 480 patients with pre-diagnosed/mostly chronic illnesses, measured in terms of Quality of Life parameters – the Illness Management Group.

5.2 Researchers

The researchers were Community Based Healthcare Workers (Ward Based Outreach Teams), trained as Tibb Lifestyle Advisors affiliated to both City of Johannesburg and Provincial Clinics. The researchers were mainly

females which was preferable, as most patients themselves were female, and in many cases known personally to the researchers.

5.3 Participants

All participants in this study were recruited by the above researchers from the different wards in Soweto (region D) City of Johannesburg. The nature of the study was explained by the advisor verbally, face-to-face, to each putative participant, with the aims and objectives provided in detail, as was the need for a high degree of compliance and attendance. No financial or other inducements were offered or expected. After explanation, participant consent was by observed signature. Patient confidentiality was maintained by the use of initials rather than actual names.

5.4 Quality of Life Parameters

The QoL parameters that were selected were according to the profile/patients involved in the study, taking into consideration their educational background, social context, and language fluency. These included the following six that were common to both groups: a) Current health status; b) Energy levels; c) Emotional state; d) Health in relation to social activities; e) Health in relation to work; f) Sleeping habits. An additional parameter in the Health Promotion group was “Fitness level”, whereas in the Illness Management group was “Being nervous about illness”.

Each of the five QoL parameters were categorised into five possible responses, ranging from either very poor/never to excellent/always.

6. Methodology

Six hundred Customized Lifestyle Factors Management Care Plan/case studies were completed over one-year, divided into four (4) three-month periods. Each three-month period was divided into three phases: initial phase or *baseline*; phase two or *intermediate* after approximately 30 days’ intervention; and phase three or *final* after approximately 90 days’ intervention. The case studies were divided into two groups: The Health Promotion group (consisting of 120 healthy volunteers mostly below the ages of 40, and free from chronic illnesses); and the Illness Management group consisting of 480 patients, mostly over the age of 40, who had previously been diagnosed with chronic illnesses such as hypertension, diabetes, HIV & AIDS and TB etc. No age limit for the assessed group participants was set.

All assessments were carried out and recorded on printed forms (Annexures) specially designed for the study. *Note: Details of Annexures as well as results are available on request – info@tibb.co.za*

At the initial phase (both Groups 1 and 2) participant’s temperament was evaluated as well as a QoL assessment completed. In the Health Promotion Group, an assessment of the current Tibb Six Lifestyle Factors was completed and the development of a Customized Lifestyle Plan related to the Lifestyle Factors was designed and explained to the clients. For the Illness Management Group, the patient’s medical history and presence of chronic illness, together with an assessment of the current Tibb Six Lifestyle Factors was completed; where after a Customized Lifestyle Plan was designed and explained. The patient was requested to continue with their current/recommended medication as prescribed by their local clinic throughout the study period.

The intermediate phase was introduced to ensure that participant adherence to protocol was satisfactory, and compliance confirmed. A second QoL was also completed at this phase. This was followed with the final phase together with the third QoL assessment completed. The initial and final phases provided the required QoL data that was recorded and reviewed for both groups.

7. Results

Of the 120 participants in the Health Promotion group 88 (73%) were female and with ages of 40 and below being 97 (81%). Of the 480 participants in the Illness Management group 375 (78%) were females with 74% above the age of 40.

The results listed below were recorded in two cut-off periods i.e. after 6 months, and at the end of the research programme. The results in the Health Promotion group, were further divided into two segments (55 and 65 clients) whereas, the results in the Illness Management group were divided into 244 and 336. Results are listed below:

7.1 Overall results in Health Promotion 120 clients

Of the 120 clients, 116 (97%) reported positive results, ranging from +1 to +15, totalling 759 positive responses. Of the remaining 4 clients, the first client reported -3 in some categories and +1 in one category (i.e. -3; +1 = **-2**). The second and third client, both reported -1 in one category and +7 in the other categories (i.e. -1; +7 = **+6**), adding up to +6 +6 = **+12**, whereas the fourth client reported no change. Therefore, the overall positives for 120 clients were 759 –2 +12 = 769.
The average positive per client was 769/120 clients = 6.40 positives.

The above overall results, consolidated from the two periods, are listed below:

7.2 Results in Health Promotion 55 clients

Of the 55 clients, 53 (96%) reported positive results, ranging from +1 to +13, totalling 310 positive responses. Of the remaining 2 clients, 1 client reported -3 in some categories and +1 in another category (i.e. -3; +1 = **-2**). The remaining client reported -1 in one category and +7 in other categories (i.e. -1; +7 = **+6**). Therefore, the overall positives for 55 clients were 310 – 2 + 6 = 314.
The average positive per client was 314/55 clients = 5.71 positives.

7.3 Results in the Health Promotion 65 clients

Of the 65 patients 63 patients reported positive results ranging from +1 to +15 totalling to +449 responses. One patients showed an overall positive (i.e. +7/-1 = **+6**). The second patient reported no change. Therefore, the overall positives were 449 +7 -1 = 455.
The average positive per client was 455/65 clients = 7.00 positives.

7.4 Overall results in Illness Management 480 clients

Of the 480 clients, 469 (97%) reported positive results, ranging from +1 to +26, which totalled 4231 positive responses. Of the remaining 11 clients, 2 clients reported no change, whereas 7 patients showed overall positive responses of (i.e. +9/-1 = **+8**; +7/-1 = **+6**; +7/-1 = **+6**; +5/-3 = **+2;** +10/-1 = **+9**; +5/-1 = **+4**; +9/-1= **+8**). One client reported an overall -1 (i.e. +1/-2 = **-1**), another client showed an overall of -17. Therefore, the overall positives for 480 clients = 4231 + 8 +6 +6 +2 +9 +4 +8; -1 -17 = 4250. However, with respect to the patient whose results after the three-month period totalled -17, this patient suffered a stroke between the second and final QoL assessment. Interestingly, this patient showed an improvement between the first and second visit of +4.
The average positive per client was 4250/480 clients = 8.85 positives.

The above overall results, consolidated from the two periods, are listed below:

7.5 Results in Illness Management 244 clients

Of the 244 clients, 237 (97%) reported positive results, ranging from -17 to +26, which totalled 2043 positive responses. Of the remaining 7 clients, 1 client reported no change, whereas 4 patients showed overall positive responses of (i.e. +9/-1 = **+8**; +7/-1 = **+6**; +7/-1 = **+6**; +5/-3 = **+2**). Of the 2 remaining patients, 1 reported an

overall -1 (i.e. +1/-2 = **-1**) and the remaining patient showed an overall of -17. Therefore, the overall positives for 244 clients = 2043 + 8 +6 +6 +2; -1 -17 = 2047. The patient with an overall of -17 result suffered from a stroke during the second and final QoL assessment – however, this patient showed an improvement between the first and second visit of +4.
The average positive per client was 2047/244 clients = 8.39 positives.

7.6 Results in the Illness Management 236 clients

Of the 236 patients 232 patients reported positive results ranging from +1 to +22 which totalled to +2188 responses. Three patients showed an overall positive (i.e. +10/-1 = **+9**; +5/-1 = **+4**; +9/-1= **+8**). The third patient reported an overall -4 (+2/-6 = **-4**) and the fourth patient reported no change. Therefore, the overall positives were 2188 +9 +4 +8 – 4 = 2205.
The average positive per client was 2188/236 clients = 9.27 positives.

8. Discussion

8.1 Overall results

The results of 97% (116 out of 120 clients) in the health promotion group and 97% (469 out of 480 patients) in the illness management group are impressive. This bears testimony to the targeted approach of the Customized Tibb Lifestyle Management Care Plan (LMCP) based on the Tibb principles of Physis, Temperament, and Qualities.
Interestingly, the results of the average positive per client in the Health Promotion group of 6.40 as compared to the average positive per patient in the Illness Management group of 8.85 suggests that although there is a definite positive impact of the Tibb Six Lifestyle Factors in both groups, understandably the positives are higher in the Illness Management group because the clients in the Health Promotion group are healthy, and for whom the scale of improvement cannot be as great as those in the illness group.

8.2 Comparison: Results between interim and final report

The results between the initial six months and the final review imply that the overall positives in the health promotion group increased from 5.71 to 7.00 positives per client. Similarly, in the illness management group the overall positives increased from 8.39 to 9.27 positives per client. This indicates that the Lifestyle Advisors interaction with the clients improved during the second half of the study after having gained experience in the development of the Lifestyle Management Care Plan.

8.3 Relevance of the CaSIPO research

The success of the CaSIPO Research of including Tibb Lifestyle Factors in Health Promotion and Illness Management will most certainly benefit the DoH's primary healthcare initiatives. The City of Johannesburg's recognition and support shows that there is local government commitment to partnerships for growth in the fight against the burden of disease. It also lays bare the need to accelerate community partnerships that seek solutions and positive outcomes to community health challenges. The CoJ support of the Tibb Lifestyle Advisors Programme is an indication that they see the need for integrated interventions focussed on a common goal - *better health for all.*

8.4 Further implementation of the CaSIPO project

To further substantiate the effectiveness of the Tibb Lifestyle Advisors, the renewed fourth phase of the Tibb/Allied partnership is aimed at implementing the CaSIPO project at City of Johannesburg clinics in community health orientated primary care. The fourth phase of the Tibb/Allied partnership includes the following:

- Mentoring over 2000 Clinic Health Promoters and Community Healthcare Worker's in developing and implementing the CaSIPO – Lifestyle Care Plan to patients across the City of Johannesburg's 136 clinics.
- Improve health outcomes for over 40,000 directly enrolled patients that will use Tibb Lifestyle Factors in the management of their pre-diagnosed illness conditions.
- Integrate Tibb Lifestyle Factors into client education programmes of WBOTs for improved patient outcomes in all regional clinics by training 3000 CHWs at clinics as Tibb Lifestyle Advisors by the end of May 2019.
- Provide further evidence based quality data on the efficacy of the Tibb Lifestyle Factors in the management of common ailments and improved Quality of Life in patients.

9. Conclusion

This pilot research project assessed the impact of the Tibb Lifestyle Factors in Health Promotion and Illness Management. It, provided meaningful positive results on the effect of lifestyle intervention by Tibb Lifestyle Advisors on the Quality of Life experienced by the target investigated groups, more specifically in patients with chronic illnesses. The extension of the Tibb Lifestyle Advisors programme over the next twelve months to more than 40000 patients attending the 126 clinics in the City of Johannesburg, should further demonstrate the impact of the Tibb Lifestyle Factors in the management of pre-diagnosed illnesses, especially the chronic diseases of lifestyle such as hypertension, diabetes, HIV & AIDS and TB.

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Finally, a sincere thank you is extended to Mr Alcon Dube APR, President of the Allied Communities Network and his team. The Organisation is the architect of the working partnership and the association with City of Johannesburg DHU and the CCP. The organisation is involved in community health work and continues to lobby for the support of the Lifestyle Advisors Programme as essential evidence backed low-cost but effective intervention in Community Oriented Primary Care in South Africa's urban and rural communities. The organisation recently won recognition for its work and was awarded honorary membership by *Netzkraft Movement*, an organisation representing good causes worldwide, with over 3,000 member organisations.

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