

A Conceptual Model of Perceived Social Support, Maqasid Shariah Quality of Life and Health Status

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Abstract: The criminal offence of most inmates in prison is related to drug abuse. Drug abuse inmates experienced higher health problems than the general public. It was reported that factors such as social support and quality of life could influence the improvement of health status among drug abuser while they were imprisonment. Previous studies suggested that there were positive relationships among perceived social support, Quality of Life (QoL) and health status. However, these studies did not extensively examine the relationships of these constructs among drug abuse inmates. Therefore, this study proposed a model that examined the relationships of these constructs among drug abuse inmates. In addition, this study proposed the use of the Maqasid Shariah approach to measure QoL which has never been examined in the previous studies. The main objective of this study is to propose a conceptual model that examines the relationship among social support, quality of life and health status among drug abuse inmates. This study expects to discover a positive relationship between social support and health status. Besides that, QoL plays the role of mediating variable in the relationship between social support and health status among drug abuse inmates. The findings of the study provide insightful information pertaining to several aspects of social support and QoL that would improve the drug abuse inmate's health status.

Key words: Perceived social support, quality of life, health, Maqasid Shariah, aspects

INTRODUCTION

Generally, drug abuse became a major public health problem that had a great influence on the well-beings of millions of people. It has been estimated that between 56 and 90% of people who inject drugs will be incarcerated at some stage. Globally, drug use is expected to rise by 25% over the next few decades as a result of rapid urbanization in developing countries. In Malaysia, total population in prison over the last 14 years (2000-2014) shows the pattern of up and down as at October 2015, a total of 51 946 inmates were in Malaysia prisons, an increase of 39.25% from the total in 2012. The National Drug Agency reported that 35% of the cases were repeat addicts. Based on the distribution of cases by ethnic group, Malay was reported to be the majority group (77%), followed by Chinese (10%) and Indian (9%). Thus, drug abuse was a serious problem among Malay youngsters since majority of them was reported to be in the productive age group ranging between 20-39 year old. In addition, it was noted that almost 97% of the

imprisoned drugs addicts are male. Currently, in Malaysia, the incidents of drug abuse were estimated to be 12 persons in everyone thousand population (1.2%). This situation gives a big effect in economic sector when this potential group has failed to give contribution in various employment sectors and filled up by migrant workers instead. Thus, the information illustrated the increasing trend in drug addiction poses a great threat to the future of the nation aspiration to become a developed country by 2020 which means a self-sufficient industrialized nation encompassing from economic prosperity, social well-being, world class education, political stability and psychological balance.

Confronting with the current scenario there was an immediate call of actions to curb the situation. There were two types of measurement outcome resulting from any drug abuse prevention programmes or activities, namely objective and socially desirable indicator of change such as no drug abuse and no criminal related activities. The second indicator, identified as functional outcomes that include measuring indicators such as quality of life and

satisfaction with treatment, receives less attention by researcher in the area (Fischer *et al.*, 2001). Thus, more efforts and attention should be given to address the functional outcomes which appear to have a direct impact on the drug abuser themselves.

Drug addiction was defined as a chronic, relapsing brain disease that affected individual behavior. It was considered as affecting individual behavior because drug addicts would compulsively seek and use drugs, despite knowing the harmful consequences of drug abuse that was long lasting brain self-destruction (Sussman, 2012). In the case of drug abuse inmates, Dahlem *et al.* (1991) suggested that the need for them to improve Quality of Life (QoL) was different from the general population and suggested that it included measurement in terms of accommodation, nutrition, dining rooms and sport facilities or other external conditions based on some agreed standards. This approach is identified as objective approach. Moreover, Maeyer *et al.* (2007) noted that most studies on substance abuse focus on Health-Related Quality of Life (HRQoL) and these authors argued that less attention were given to address the shortfall of studying drug abuse inmate's Quality of Life (QoL) from the perspective of inmates. This approach of measuring QoL of drug abuse inmates was classified as the subjective approach where the perspective of the person was taken into considered. In addition, Maeyer *et al.* (2009) proposed that HRQOL (health status) was the outcome measure of QoL. In another word, health status of the drug abuse inmates depended on their QoL. Similarly, in an earlier study by Mohamad *et al.* (2007) suggested that QoL had an influence on health status.

In general, comparatively the overall health status of inmates was poorer than the general community (Bernier

and Lellan, 2011). Some studies indicated that drug abuse was closely related to the widespread distribution of infectious diseases such as HIV (Kaushik *et al.*, 2011). In addition to physical health, previous study also showed that drug abuse inmate's face with mental health problem during imprisonment. Krokavcova *et al.* (2008) suggested that perceived social support was one of the most important predictors of health status. Moreover, a study by Benda (2005) among drug abuse inmates, uncovered that social support was important to prevent drug addicts relapse and reimprisonment upon the released from prison.

Based on this background, the main aim of this study is to examine the relationships among social support, QoL and health status of drug abuse inmates. The importance of the study is to address the gaps in the literatures based on four major aspects. First, inadequate attention is given to measure the subjective approach of drug abuse inmate's QoL (Maeyer *et al.*, 2009). Second, to consider health status as the outcome measure of QoL as suggested by Maeyer *et al.* (2009). Third, to address the urgent need to elaborate on the conceptualization of QoL based on drug user's experiences and perspectives (Farquhar, 1995). In this case, this study measured QoL based on Maqasid Shariah principles using the subjective approach. Finally, to address lack of study that examines the mediating role of QoL on the relationship between social support and health status as indicated in Table 1.

The findings of the study will provide insightful information pertaining to the different aspects of health status and Maqasid Shariah approach of QoL of drug abuse inmates. In addition, the findings of this study would provide insightful information with respect to the mediating role of QoL on the relationship social support

Table 1: The relationship of Social Support (SS), Quality of Life (QoL) and Health Status (HS)

Researchers	Relationship			
	H ₁ (SS-HS)	H ₂ (QoL-HS)	H ₃ (SS-QoL)	H ₄ (SS-QoL-HS)
Harp <i>et al.</i> (2012)	/	NA	/	NA
Eom <i>et al.</i> (2013)	/	NA	/	NA
Crow and Smykla	/	NA	/	NA
Mohamad (2007)	NA	/	NA	NA
Umberson and Montez (2010)	/	NA	NA	NA
Schalock and Verdugo Alonso	NA	NA	/	NA
Zubaran <i>et al.</i> (2008)	NA	/	NA	NA
Tariqi and Tamini	/	NA	NA	NA
Sippel <i>et al.</i> (2015)	/	NA	NA	NA
Wallace <i>et al.</i> (2016)	/	NA	NA	NA
Tamannaefar and Behzadmoghaddam (2016)	/	NA	NA	NA
Khan (2015)	NA	NA	/	NA
Tercan (2014)	NA	NA	/	NA
Mukiza (2014)	NA	/	NA	NA

(/) Significant, (NA) Not Applicable, (HS) Health Status, (SS) Social Support, (QoL) Quality of Life

between and health status. The study would to propose a model that examined the relationships of social support, QoL and health status perceived by drug abuse inmates. Moreover, the study will suggest aspects of social support and QoL that would help to improve the drug abuse inmate's health status. This study is structured as follows:

- To determine the direct impact of social support on health status of drug abuse inmates
- To determine the direct impact of social support on QoL of drug abuse inmates
- To ascertain the direct impact of QoL on the health status of drug abuse inmates
- To examine the mediating role of QoL on the relationship between social support and health status of drug abuse inmates.

Literature review

Health status: Most of studies views health as a multidimensional concept (Alslman *et al.*, 2015; Sabbah *et al.*, 2013). This multidimensional concept can be seen in the definition of health proposed by the World Health Organization, health is “state of complete physical, mental and social well-being”. From the definition, there are three dimension of measurement; physical, mental and social health. However, the concept of health status defined by Ware *et al.* (1998) consisted of eight domains: physical functioning, role physical, bodily pain, general health perceptions, vitality, social functioning, role-emotional and mental health. In this conceptualization, health status valuations measure overall level of health (for a state specified in terms of a set of domain-specific capacities). However, Roguski and Chauvel (2009) suggested that health comprised of four major aspects: social relations, physical growth and development, spiritual and the mental capacity.

The “good health” and “well-being” are recognized as the key criteria to successful prisoner's rehabilitation and reintegration (Woodall, 2016). The effects of drug addiction in terms of physical health, they experienced higher Human Immunodeficiency Virus (HIV) and Hepatitis C Virus (HCV), hypertension, asthma, arthritis and cervical cancer than their non-incarcerated counterparts (Binswanger *et al.*, 2009). Besides, it can affect in different body organs like digestive system, the lung and cardiovascular system (Behzad *et al.*, 2016). In addition, Schnittker *et al.* (2012) suggested that some inmates experience mental health problems, they were associated with emotional reactions, such as anxiety. Previous studies (Eom *et al.*, 2013) examined the impacts of social support on QoL and health status among drug

abuse inmate. According to Mukiza (2014), to promote the health of inmates and mainly their physical health, physical activities such as walking, jogging, stationary cycling and jumping rope should be made available. Findings of their studies suggested that social support and QoL had direct influence on health status.

MATERIALS AND METHODS

Social support: A number of researchers have attempted to define the concept of Social support. Social support is defined as the “existence or availability of people on whom we can rely, people who let us know that they care about, value and love us” (Sarason *et al.*, 1983). While, Sahban *et al.* (2015) view social support as the presence of other people who can be trusted, people that make others loved for, pleasures that cannot be quantifiable. In these two definition, the key features of social support are important people that can be from family, friends, pets, neighbours, co-workers, organizations and etc. Social support is linked to many health benefits both in terms of physical and mental health (Sarason *et al.*, 1983). According to this definition, social support is any kind of communication with important people will helps individuals feel more convinced about a situation and therefore, feel as if they have control over the situation.

This definition is somewhat limited because it preferred the network of typical people who are available to provide support and not providing a form of social support. According to Berkman *et al.* (2014), social support is divided into subtypes which include emotional, instrumental, appraisal and informational support. Emotional support is related to the amount of love and caring, sympathy and understanding or value available from others” (Thoits, 1995). While instrumental support refers to aid in kind, money or labour (House, 1981) and appraisal support relates to help in decision-making, giving appropriate feedback, or help deciding which course of action to take (Uchino, 2006). Although, all the definitions emphasized different features of social support, none of these definitions encompassed all of the aspects that necessary when defining social support. By combining the definition from the perspective of perceived social support, it is become an interactive process and much more significant.

In relation to health status, perceived social support is one of the most important predictors of health status (Krokavcova *et al.*, 2008). A research done by Benda (2005) on drug abuse inmates, social support is identified as an important factor that prevent drug addicts relapse and reimprisonment upon release from prison.

Additionally, research done by Sippel *et al.* (2015) and Wallace *et al.* (2016) demonstrated that social support influenced health, indicating that higher levels of social support lead to more positive health outcomes. Studies show that social relationships have short and long-term effects on mental health, health behaviour, physical health and mortality risk (Umberson and Montez, 2010). Previous research on social support in psychology, sociology, social work and medicine found that social support had a significant and positive impact on individual well-being and functioning (Harp *et al.*, 2012). Individuals with adequate social support report greater physical and mental well-being (Eom, *et al.*, 2013). Moreover, social support not only affects health status but also influences QoL (Eom, *et al.*, 2013).

Social support also is associated with QoL. Specifically, inmates who perceived having social support during and after imprisonment were more likely to have a source of income, had fewer daily problems and were more satisfied with life (Harp *et al.*, 2012). Family stability and emotional support from home can affect an inmate's chance of success in a number of ways. Families provide not only emotional support to encourage inmates to maintain a law-abiding life but in terms of housing and financial support as well. Loss of social support during incarceration could extend the post-release period and negatively affect health. Based on the above background, the following two hypotheses were proposed:

- H₁: There is a significant and direct effect of social support on health status
- H₂: There is a significant and direct effect of social supports and quality of life

Quality of Life (QoL): The discussions on QoL were observed to be done from three major perspectives namely a scientific perspective of medical science, economic science and social science (Cummins, 2005). Sirgy (1986) defined QoL using the Maslow's hierarchy of need and suggested that QoL as the level of hierarchical needs satisfaction of most members of a given society. Bowling (2014) provides the general definition of QoL as goodness of life and being able to live successfully and happily within the environment (Kane, 2001). Different authors defined QoL differently based on their perspectives and background (Mohamad, 2007). Thus, this becomes a challenge to researchers since there are several definitions and assessment measurements of QoL. There were two approaches of measuring QoL: objective and subjective. The objective measurement covers the needs of social and cultural such as wealth, social status and physical prosperity. On the other hand, subjective

measurement of the quality of life deals with the feeling of happiness and individual satisfaction with life as a whole (Sirgy, 1986). The study by Mohamad *et al.* (2014) suggested that QoL had a significant direct impact on health status, measured by physical health, emotional health and spiritual health. Recently, Zubaran *et al.* (2008) illustrated that there was significant correlation between QoL and health status. The concept of Quality of Life among drug abuse inmates in prison

It was noted that most studies on QoL among substance user were limited and related to aspects of health-related QoL (HRQoL) (Maeyer *et al.*, 2009; Zubaran and Foresti, 2009) and were more towards using the objective approach of measuring QoL. As oppose to the subjective method of measuring QoL, this approach neglected the individual's perspectives. Fischer *et al.* (2001) echoed the research of Farquhar (1995) that urged efforts should be undertaken to elaborate the conceptualization of QoL, based on drug user's experiences and perspectives. Studies on drug abuse inmates should be extended to cover the scope on not only the effectiveness of treatment, but also the client's participation in terms of assessing QoL from their perspective that would have positive influence on their personal well-being.

The living condition in the prison exposed inmates to unhappy experiences such as overcrowding (Guerrero and Marco, 2012), fear of punishment, separation from their family members, frustrations and these are contributing factors that could give negative effects to the inmate's physical and mental condition of inmates (Roguski and Chauvel, 2009). More importantly, drug addiction is a factor of mental health problem and reduce their quality of life (Behzad *et al.*, 2016). Thus, it is important to find balance in fulfilling individual needs in order to achieve an individual's happiness and satisfaction (Mohamad *et al.*, 2014). It is noted that measuring the QoL using Maslow's Hierarchy of Needs failed to completely fulfill the measurement required for QoL. The Maslow's Hierarchy of Needs only assessed the needs and desire aspects. However, Maqasid Shariah approach includes another aspect which are justice, spiritual and public interest. According to Dusuki and Abdullah (2007), measurements of quality of life by using Maqasid Shariah is a holistic approach based on the following reasons:

- Measurement of quality of life by Maqasid Shariah encompasses five main dimensions that cover the needs in life as commanded by Allah; religion, life, mind, lineage and property (Ghazali, 1901)
- All five aspects of life are firmly connected and balance between these five aspects is prioritized

- Protecting the relationship and balance between these five dimensions fulfills the needs that guarantee the prosperity or happiness in this world and hereafter

The command to maintain balanced QoL was mentioned in the Holy Quran as guidance to all Muslims. Measurement of quality of life by Maqasid Shariah encompasses five main dimensions that cover the needs in life as commanded by Allah; religion, life, mind, lineage and property (Ghazali, 1901). The commandment to guard all five components of the Maqasid Shariah has proven that Islam is the complete, comprehensive and relevant-at-all-times approach lifestyle and it can be applied in all aspects in everyday life (Dusuki and Bouheraoua, 2011). This principle is the basic and fundamental base for forming the framework and models in measuring the Maqasid Shariah quality of life of inmate drug abuser in prison.

Table 1 show research works of several authors from year 2002 until 2016. Harp *et al.* (2012), Eom *et al.* (2013), Tercan (2014) and Khan (2015) found the positive relationship between social support and quality of life. While, Eom *et al.* (2013), Harp *et al.* (2012), Umberson and Montez (2010) studying on the relationship among social support, quality of life and health status and Tamannaefar and Behzadmoghaddam (2016) and Sippel *et al.* (2015) found the relationship between social support and health status. The findings by Mohamad (2007) found that there was a relationship between quality of life and health status and Zubaran *et al.* (2008) found that there was significant correlation between QoL and health status. There are no studies on the mediation of the constructs. Based on the above, the following hypotheses were developed (Hypotheses 4 was proposed to address the gap in the literature):

- H₃: There is a significant and direct relationship between quality of life and health status
- H₄: Quality of life mediates the relationship between social support and health status

RESULTS AND DISCUSSION

The suggested conceptual framework of health status provides possible antecedents and mediators of health status to prison management. Along with possible antecedents and mediators prison management can help inmates for a successful return to society. In this regard, this proposed framework should assist prison management to identify antecedents and mediators to

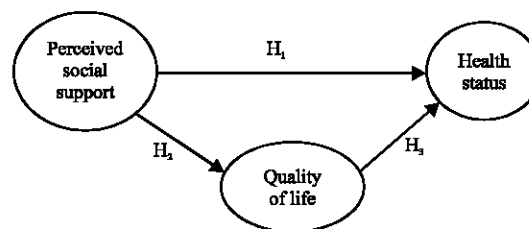


Fig. 1: Proposed conceptual model

help inmates. On the other hand, by identifying significant antecedents should help prison management to develop suitable programmes may create positive environments to develop a positive support from family, friends and significant others among inmates. In this perspective, this suggested framework will assist prison management to help inmates develop social skills that is significantly mediated by the degree of their quality of life (Fig. 1).

Finally, this proposed framework should not only provide theoretical confirmation that supports the significance of antecedents and mediators of health status but also will present an accomplishment process which will show how the antecedents and mediators of health status can affect drug inmates. Therefore, we believe this proposed framework provides the much needed indication that high level of social support and quality of life increase the probability of the effect of health status of drug inmates.

CONCLUSION

This study proposed a research framework that examined the relationships of social support, QoL and health status among drug abuse inmates. The suggested conceptual model will provide insightful information pertaining to develop and validate domains that measure social support, QoL and health status among drug abuse inmates. This study is expected to uncover a positive relationship between social support and health status. Besides, quality of life plays the role of mediating variable in the relationship between social support and health status among drug abuse inmates. We suggest that the antecedents and mediators of health status dimensions in the context of suggested conceptual framework of health status would be a potential for creating a good health among drug inmates because the antecedents and mediators of health status can offer valuable managerial implications that will help the prison management especially. Overall, we suggest that the social support dimension (family, friends and significant others) and mediation of quality of life from Maqasid Shariah

perspectives (religion, life, mind, lineage and property) proposed in a conceptual framework of health status can enable prison management to create a significant programmes that will help inmates in managing their health status. However, the study presents the proposal of research project into the effect of social support and Maqasid Shariah quality of life on health status in order to suggest suitable strategies for prison authority. The next stage of this research is to conduct Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA) using Structural Equation Modeling (SEM) to examine and validate the relationship through empirical data collection.

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REFERENCES

- Alsman, E.T., M.M. Ahmad, M.A.B. Hani and H.M. Atiyeh, 2015. Health: A developing concept in nursing. *Int. J. Nurs. Knowl.*, Vol. 2,
- Behzad, K., B. Majid, R. Shoeib, Z. Razieh and F. Mohammad *et al.*, 2016. Mental health status: A cross sectional study among male addicts in the West of Iran. *J. Res. Med. Sci.*, 10: 159-163.
- Benda, B.B., 2005. Gender differences in life-course theory of recidivism: A survival analysis. *Int. J. Offender Ther. Comp. Criminology*, 49: 325-342.
- Berkman, L.F., I. Kawachi and M.M. Glymour, 2014. *Social Epidemiology*. University of Oxford, Oxford, England, UK.
- Bernier, J.R. and M.K. Lellan, 2011. Health status and health services use of female and male prisoners in provincial jail. Atlantic Centre Excellence Women's Health, Ottawa, Canada. https://www.dal.ca/content/dam/dalhousie/pdf/ace-women-health/3/ACEWH_prisoners_health_provincial_jails_en.pdf.
- Binswanger, I.A., P.M. Krueger and J.F. Steiner, 2009. Prevalence of chronic medical conditions among jail and prison inmates in the United States compared with the general population. *J. Epidemiology Commun. Health*, 63: 912-919.
- Bowling, A., 2014. *Quality of Life: Measures and Meanings in Social Care Research*. University of Southampton, Southampton, England, ISBN: 9781909890107, Pages: 27.
- Cummins, R.A., 2005. Moving from the quality of life concept to a theory. *J. Intellectual Disability Res.*, 49: 699-706.
- Dahlem, N.W., G.D. Zimet and R.R. Walker, 1991. The multidimensional scale of perceived social support: A confirmation study. *J. Clin. Psychol.*, 47: 756-761.
- Dusuki, A.W. and N.I. Abdullah, 2007. Maqasid al-shari'ah, Maslahah and corporate social responsibility. *Am. J. Islamic Soc. Sci.*, 24: 25-45.
- Dusuki, A.W. and S. Bouheraoua, 2011. The framework of maqasid al-shari'ah and its implication for Islamic finance. *Islam Civilisational Renewal*, 2: 316-336.
- Eom, C.S., D.W. Shin, S.Y. Kim, H.K. Yang and H.S. Jo *et al.*, 2013. Impact of perceived social support on the mental health and health related quality of life in cancer patients: Results from a nationwide, multicenter survey in South Korea. *Psychol Oncol.*, 22: 1283-1290.
- Farquhar, M., 1995. Definitions of quality of life: A taxonomy. *J. Adv. Nurs.*, 22: 502-508.
- Fischer, B., J. Rehm and G. Kim, 2001. Whose quality of life is it, really. *Br. Med. J.*, 322: 1357-1360.
- Ghazali, A.A.H., 1901. *Al Mustafa Min Ilm Al-Usul*. 1st Edn., Al-Matba'ah al-Amiriyyah, Cairo, Egypt.
- Guerrero, G.J. and A. Marco, 2012. Overcrowding in prisons and its impact on health. *Rev. Esp. Sanidad Penitenciaria*, 14: 106-113.
- Harp, K.L., C. Oser and C. Leukefeld, 2012. Social support and crack cocaine use among incarcerated mothers and nonmothers. *Subst. Misuse*, 47: 686-694.
- House, J.S., 1981. *Work, Stress and Social Support*. Addison Wesley, Reading, Massachusetts.
- Kane, R.A., 2001. Long-term care and a good quality of life bringing them closer together. *Gerontologist*, 41: 293-304.
- Kaushik, K.S., K. Kapila and A.K. Praharaj, 2011. Shooting up: The interface of microbial infections and drug abuse. *J. Med. Microbiol.*, 60: 408-422.
- Khan, M.A., 2015. Impact of social support on life satisfaction among adolescents. *Int. J. Indian Psychol.*, 2: 98-104.
- Krokavcova, M., V.J.P. Dijk, I. Nagyova, J. Rosenberger and M. Gavelova *et al.*, 2008. Social support as a predictor of perceived health status in patients with multiple sclerosis. *Patient Educ. Counseling*, 73: 159-165.
- Maeyer, D.J., W. Vanderplasschen and E. Broekaert, 2009. Exploratory study on drug User's perspectives on quality of life: More than health-related quality of life?. *Soc. Indicators Res.*, 90: 107-126.
- Mohamad, M., 2007. Modeling coastal zone community quality of life and health status. *Int. J. Soc. Sci.*, 2: 39-48.

- Mohamad, M., M.A.N. Azman, N. Mohamad, W.C.W.M. Yusof and F. Karim, 2014. Quality of Life Approach the Concept of Syariah. Universiti Sultan Zainal Abidin, Kuala Terengganu, Malaysia, Pages: 136.
- Mukiza, F., 2014. Physical Activity and Prisoner's Health: A Qualitative Systematic Review. University of Tromso, Tromso, Norway.
- Roguski, M. and F. Chauvel, 2009. The Effects of Imprisonment on Inmate's and their Familie's Health and Wellbeing. Litmus, Wellington, New Zealand, Pages: 96.
- Sabbah, I., H. Sabbah, R. Khamis, S. Sabbah and N. Droubi, 2013. Health related quality of life of university students in Lebanon: Lifestyles behaviors and socio-demographic predictors. *Health*, 5: 1-12.
- Sahban, M.A., M. Kumar and S.S. Ramalu, 2015. Instrument development: Entrepreneurial Social Support Assessment Instrument (IESSA). *Res. J. Econ. Bus. Stud.*, 4: 21-36.
- Sarason, I.G., H.M. Levine, R.B. Basham and B.R. Sarason, 1983. Assessing social support: The social support questionnaire. *J. Personality Soc. Psychol.*, 44: 127-139.
- Schnittker, J., M. Massoglia and C. Uggen, 2012. Out and down: Incarceration and psychiatric disorders. *J. Health Soc. Behav.*, 53: 448-464.
- Sippel, L.M., R.H. Pietrzak, D.S. Charney, L.C. Mayes and S.M. Southwick, 2015. How does social support enhance resilience in the trauma-exposed individual?. *Ecol. Soc.*, 20: 136-145.
- Sirgy, M.J., 1986. A quality of life theory derived from maslow's developmental perspective. *Am. J. Econ. Soc.*, 45: 329-342.
- Sussman, S., 2012. Substance and behavioral addictions: Co-occurrence and Specificity. *Int. J. Environ. Res. Public Health*, 9: 164-208.
- Tamannaefar, M.R. and R. Behzadmoghaddam, 2016. Examination of the relationship between life satisfaction and perceived social support. *Hum. Resour. Manage.*, 3: 8-15.
- Tercan, E., 2014. Perceived social support from family, participation in recreational sport activities, leisure negotiation and life Satisfaction in university students. *Mevlana Int. J. Educ.*, 4: 260-273.
- Thoits, P.A., 1995. Stress, coping and social support processes: Where are we? What next? *J. Health Soc. Behav.*, 35: 53-79.
- Uchino, B.N., 2006. Social support and health: A review of physiological processes potentially underlying links to disease outcomes. *J. Behav. Med.*, 29: 377-387.
- Umberson, D. and J.K. Montez, 2010. Social relationships and health a flashpoint for health policy. *J. Health Soc. Behav.*, 51: S54-S66.
- Wallace, D., C. Fahmy, L. Cotton, C. Jimmons and M.R. Kay *et al.*, 2016. Examining the role of familial support during prison and after release on post-incarceration mental health. *Int. J. Offender Ther. Comp. Criminology*, 60: 3-20.
- Ware, J.E., S.D. Keller and M. Kosinski, 1998. *Sf-12: How to Score the Sf-12 Physical and Mental Health Summary Scales*. Quality Metric Inc. Boston, Massachusetts, Pages: 97.
- Woodall, J., 2016. A critical examination of the health promoting prison two decades on. *Crit Public Health*, 26: 615-621.
- Zubaran, C. and K. Foresti, 2009. Quality of life and substance use: Concepts and recent tendencies. *Curr. Opin. Psychiatry*, 22: 281-286.
- Zubaran, C., K. Persch, D. Tarso, A. Ioppi and J. Mezzich, 2008. The correlation between health status and quality of life in southern Brazil. *Sao Paulo Med. J.*, 126: 257-261.