Review Article

Role of social support in tobacco cessation

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ABSTRACT

Most tobacco intervention focus on behavioural methods to reduce dependence, the role of social support is unclear. The objective is to evaluate the evidence of social support as well as its efficacy with respect to tobacco cessation. It explores to understand the role of social support for an individual to make a behaviour change. Social support is one resource in the environment, if used effectively can be extremely beneficial for someone wanting to quit tobacco. A comprehensive literature search on the contribution of social support with respect to tobacco cessation was conducted to give a practical review for practitioners in the field. Overall, it was seen that all the studies strengthened the evidence for the role of social support in tobacco cessation. Although, more research is required in this field to comprehend the long haul advantages of social support and additionally its effects on psychological well-being as well as relapse prevention.

Keywords: Social support, Interventions, Tobacco cessation

INTRODUCTION

Tobacco use is one of the most avoidable health risk.[1] Tobacco contains nicotine, which is a naturally addictive substance.[2] Nicotine has the same effects of that of any other addictive drug. It increases the dopamine level, which is the brain's pleasure centre giving the user a feeling of bliss. It is both a stimulant and a depressant, which is what leads to its dependence. As nicotine is highly addictive, tobacco cessation is very strenuous and also prolonged. During nicotine withdrawal, individuals experience irritability, anxiety, insomnia, restlessness, lack of concentration and the intense urge to use tobacco. Along with having these direct effects physiologically, it also has an impact on an individual's mind through conditioning, which is an associative learning process. This occurs when the physiological effects of nicotine occur with certain social and environmental cues. For example, users may learn to associate using tobacco with a drink. When they stop using, with physical withdrawal,

they also to face psychological obstacles, such as identifying and avoiding the cues for tobacco use. Tobacco use causes lung cancer, cardiovascular disease, cancer, infertility, premature aging, and psychiatric disorders such as depression which has a high correlation to tobacco use.[3-5]

There are five stages in the tobacco use beginning with initiation, where they first experiment with the use of the substance. Next, there is escalation where the user has increased their use drastically; this stage is followed by maintenance, where individuals are able to consistently maintain their use for long periods of time. At this stage, they experience maximum physiological as well as psychological effect and hence need tobacco cessation. Tobacco cessation refers to the discontinuation of tobacco use. This is the fourth stage were chances of relapse is also high. Relapse is when the individual after a period of abstinence starts using again and gets caught in the vicious cycle of abuse. The final stage in the tobacco

use is recovery where the individual is successfully able to maintain long term abstinence. With respect to tobacco cessation, the treatment process generally involves pharmacological methods coupled with psychological interventions programs.

Pharmacological interventions have all the earmarks of being essential to enable individuals to manage symptoms of tobacco withdrawal; it includes nicotine replacement therapy such as nicotine gum, spray, inhaler and additional medications. Psychological interventions, on the other hand, can help individuals manage their behavioural as well as social cues for cessation and develop strategies or coping mechanisms to successfully avoid relapse. They include behavioural, psychosocial and group interventions.

The role of social support assumes a vital role with respect to tobacco cessation and has a major impact on the initiation, maintenance as well as the cessation of tobacco use. Use of tobacco and abstinence can have a drastic effect on the individual's personal relationships. Social support is referred to as either social help or resources that non health professionals provide for an individual in a formal setting within the context of a care or support group or in an informal setting involving any kind of relationship. Social support can be an effective coping mechanism with respect to how the individual is able to deal with the desire to use tobacco when they are distressed. So, it could also be an effective predictor for tobacco cessation.

THE TRANSTHEORETICAL MODEL OF CHANGE AND SOCIAL SUPPORT

The transtheoretical model of change facilitates any kind of behaviour change. In order to undergo a behaviour change, an individual has to go through a series of five succeeding stages. The first stage is pre-contemplation when the individual is unaware that there is a problem, and has not thought about changing in any way. The next stage is contemplation, where he/she is aware that there is a problem and wants to change. The third stage is preparation when he/she is preparing emotionally to change and intends to act on it, following that is the stage of action, where they take the necessary step. In maintenance, which is the fifth step, the consistently maintain the behaviour change that they are implementing. The last stage is termination, which is when the behaviour change has occurred.[6] Once the individual's stage of change is identified, then there are particular tasks that are to be accomplished for a behaviour change to occur (i.e., tobacco cessation).

Social support with the use of experiential and behavioural techniques is most likely to yield better outcomes for tobacco cessation. Social support can be of two types, they are objective and subjective support. Objective social support is the support received from family members, friends, acquaintances, and those in an individual's social network. Subjective support, on the other hand, is the perception of that individual's social support that they are receiving.[7] Subjective positive support leads to positive outcomes with respect to tobacco cessation, and it also decreases negative psychological impact with those diagnosed with any kind of illness.[8,9]

As the individual proceeds through the stages of change, the social support the individual receives is also most likely to increase. Although ambivalence, is not associated with the social support the individual receives.[10] Social support can be differentiated into positive and negative support, both of which can exert a distinct impact on the individual. Positive support could facilitate better adaptive coping mechanisms whereas negative support such as over criticality and over emotionality can lead to relapse. Positive support is highest during the 12th week.[11] This is when the individuals are in the action stage of change where they have made a commitment and have implemented changes in their behaviour to quit. After the 12th week, the social support they receive decreases. Negative support, on the other hand, is useful during follow up sessions to maintain sustained motivation. Both positive and negative support plays a crucial role during the early stages of quitting. However, continued reduction of negative support is a significant predictor for the maintenance of smoking cessation.[11] A combination of both positive and negative behaviour is necessary for best outcome result than only positive or negative behaviours. Partners supporting their spouse appeared less interactive, but they are likely to perform a positive behaviour to those in cessation. Therefore, the context of the relationship determines whether or not individuals receive supportive or non-supportive behaviors.[12] When commodity model is used for tobacco cessation, it leads to increased positive outcomes, but if there is a decrease in social support that the individual is receiving, then they are more likely to relapse and start using tobacco again. The commodity model of support stresses on support as providing resources to increase pursuing goals as well as coping with the stressors.[13]

IMPACT OF SOCIAL SUPPORT ON TOBACCO CESSATION

The nature of the relationship the individual shares with the supporter can have drastic repercussions on the maintenance of tobacco cessation as well as relapse. Men who are supported are more likely to have better outcomes in maintenance of tobacco cessation than women who are supported. Although being married enabled tobacco cessation, it has low correlation with long term abstinence.[14] Those individuals supported by an ex-smoker who are in long term abstinence are more likely to achieve long term abstinence themselves, however if the same person is supported by a smoker then they are less likely to achieve long term abstinence but the cessation percentage was greater than 30%.[15] If they

happen to have a smoker in their social circle, it will impede their maintenance of tobacco cessation.[14] Women with lower social and emotional support, are more likely to indulge in tobacco use, however, this is not true for men. Men who had lower social support did not resort to tobacco use.[15] Stress is an important confounding variable that will affect cessation, as it increases an individual's risk for relapse and use. The threshold for stress depends on the personality makeup and the type as well. Those individuals with the lower work load and decreased responsibility tended to abstain from tobacco for a substantiate amount of time. They also had higher social support and were of the Type B personality. Friedman & Rosenman gave two personality types (Type A and Type B) based on their response to stress. Type B individuals were those who are more laid back, tolerant, reflective and even-tempered. Lower social support and higher job stress led to an increased smoking intensity and negative outcomes towards cessation and abstinence. Individuals with higher social support had reduced intake or use.[16] Social support has an impact on the stress level after individuals quit smoking, especially among socially and economically disadvantaged cohort. Therefore, it is of paramount importance that there must be an emphasis on increasing social support during or after the cessation in order to reduce the levels of stress during quitting with respect to their associated withdrawal symptoms.[17] The level of stress is likely to decrease, as the abstinence time increases. Distressing conditions may add to increased chances of tobacco use.[18] Consequently, certain factors such as perceived stress, economic stress, biomarkers of stress all are more likely to cause the relapse.[12,19-21]

Those with any one support person who was part of their tobacco cessation program had higher cessation rates than those who had no support person, which was assessed at 3, 6 and 12 months. It was higher with men, and women showed no effect with respect to long term abstinence.[22]

ROLE OF A PARTNER SUPPORT ON TOBACCO CESSATION

The partner of an individual dependent on tobacco can play an important role during their recovery or to maintain long term abstinence as they are a critical part of the individual's life. Increased spousal support and the individual's perceived notion of social support are related to short term maintenance of abstinence.[23] Women who have quit or reduced their intake of tobacco when they conceive, they do so primarily to reduce any risk to the foetus. However, they also feel that they are obliged to cut down their intake or quit because of social judgements they receive for their use. When both the partners have maintained some kind of tobacco-related routines, it was observed that women reduced their intake, it modified their routines which invariably had an effect on the couple's dynamics. This became a primary factor for their conflict also depending on whether they had a disengaged, conflictual or an accommodating relationship.[24] Although women are most likely to have a

relapse or increased intake postpartum.[25] Men whose partners were pregnant face certain obstacles to quitting and also had misconceptions about their tobacco use. One of the primary beliefs they had was that they were to a great extent not aware that their use could potentially harm the foetus. When pregnant women themselves were users, their partners felt that their use was inconsequential. They also had a misconception that the foetus was protected inside the mother, which was also what led to their lack of motivation to quit their use. The other reason men are not able to quit is that their withdrawal led to a lot of stress which become a source of conflict for the couple.[26]

When long term tobacco cessation and abstinence were assessed after a 12 month follow up, in individuals supported by women partners during cessation programs, were most likely to be successful.[27] In addition to that, when social support was included with behavioural cessation interventions, during 3 months follow up, there were positive outcomes in both men and women, however, at 1 year follow up, it was seen that social support with respect to tobacco cessation played a greater role in men than in women.[28] It was noted that almost 71% of women played a role in their partner's tobacco cessation programs from the enlistment into the program, to program materials as well as cessation activities with their partner. Women played an extensive role in all stages of their partner's cessation. This alleviated the effect of baseline depression in individuals and also predicted abstinence at 6 month follow up.[29] Those with a smoking partner had lower abstinence rates (28.3%) than those with a non-smoking partner (46.5%). Women with a smoking partner have higher chances of relapse than men.[30] Self-efficacy is a significant predictor of relapse over time.[31] There is a strong positive correlation between self-efficacy and smoking behaviour.[32]

When the couple is in a committed long term relationship, there are higher chances of better outcomes in tobacco cessation, when interventions focus on increasing supportive behaviour as well as decreasing over critical behavior.[33] When alterations were made to marital adjustments, social status, use of alcohol, physical activity, it was seen that there was a strong correlation with smoking cessation quit rates and emotional support.[34] Men tend to receive lower social support when compared to women, because of which they may also consider the support they receive from their spouse most helpful. As women may use the social support they receive as a resource, they may also find spousal support to be extremely helpful in terms of cessation and abstinence.[35]

ROLE OF A PEER SUPPORT ON TOBACCO CESSATION

Peer support includes social support, experiential learning, helper-therapy principle, social learning theory as well as social comparison theory.[36] When peer support

interventions are used for cessation especially on any disadvantaged group, it holds larger prominence as these groups have meagre chances to such support otherwise. Better outcomes with respect to tobacco cessation in seen with respect to peer support interventions, however this is only with regard to short term improvement but not long term abstinence.[37] In adolescents, social influence of peer played a significant role with respect to their cessation.[38] Increased use was attributed to factors such as perceived social support of the peer group and reduced family support.[39] In the same adolescent cohort, increased social support from parents leads to drastic reduction of the use of tobacco. Parental social support leads to higher behavioural coping mechanisms, increased academic achievements, increased endurance for deviant peer pressure.[40] But, those adolescents who experienced an inability to feel connected with the members of their family had increased possibility to use tobacco.[41] For pregnant adolescent's peer support interventions involving a buddy system largely helped them to reduce their intake than usual care.[42] Buddy system is when users are provided with one or more than one individual to support them. However, for older adults use of a buddy system, however, did not have positive outcomes with respect to tobacco cessation.[43] Also for pregnant user's peer support proved to be beneficial to reduce their intake, however, it had no effect on their abstinence. This invariably improved the infant's health as reduced tobacco intake led to increasing in the birth weight.[44] In childhood cancer survivors there were better outcomes for cessation when there was a counselling group than with a self-help group at 8 and 12 month follow ups. If baseline self-efficacy and readiness to change are controlled than the same cohort group is twice as more likely to achieve cessation than self-help group.[45] In a mental health setting with adults with serious psychiatric illness, peer support interventions had the highest outcomes.[46] It should also be noted that, lack of social support, puts an individual at a greater risk for depression.[41]

CONCLUSION

Despite the fact that the field of tobacco cessation has progressed fundamentally with more novel interventions, this review was done to evaluate effectiveness of interventions using social support and their impact on tobacco cessation as well as long term abstinence. The interventions involving social support did not appear to have any negative effect, it yielded positive outcomes with respect to tobacco cessation. Peer support, however, proved to be effective largely with respect to reduced intake and short term abstinence but not much effectiveness is reported with respect to long term abstinence. Social support interventions were most effective when provided in conjunction with other strategies and pharmacological methods. Therefore, the evidence clearly suggests that social support does have an impact on the cessation of tobacco and the role of social support is seen as a major predictor for tobacco cessation.

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