

## APPLICATION OF PROTECTION MOTIVATION THEORY (PMT) AND HEALTH ACTION PROCESS APPROACH (HAPA) IN PROMOTING WOMEN'S ADAPTIVE ENGAGEMENT TOWARDS BREAST SELF EXAMINATION

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### ABSTRACT

*The base of this study is to apply protection motivation theory (PMT) and health action process approach (HAPA) to promote women's adaptive engagements towards breast self examination. The background of the study investigated health risk factors of breast cancer, attitudes and behaviours towards early breast cancer detection to reduce its prevalence rate. The health action process approach (HAPA) was diligently looked at as propounded by Ralf Schwarzer and the protection motivation theory as propounded by Rogers, R. in 1975 as explanation for this phenomenon towards predicting behaviours and redirecting action toward health promotion. The health risk behaviour streamlined was poor attitude and behaviour of breast self examination leading to high mortality rate from breast cancer. The theories were scholarly utilized to this behavioural contingent and suggest motivational and adaptive approach to curtail this health risk behaviour. The need for sustainable attitude towards breast self examination was reinforced through health education indices towards health promotion.*

**Keywords:** Adaptive, breast self examination (BSE), self efficacy, health promotion

### INTRODUCTION

Breast cancer is one of the leading causes of cancer death in the world today (Holloway, 2009), many people contribute to their own mortality and premature mortality by behaving in a unhealthy way, which could be referred to as health risk behaviours such as tobacco use, poor dietary patterns, unprotected sexual activities, sedentary lifestyles and excessive alcohol consumption (Aideyan, Igudia and Owie, 2013). Breast self examination (BSE) is a screening method used in an attempt to detect early breast lumps that are carcinogenic. The method involves the woman herself looking at and feeling each breast for possible lumps, distortion or swellings, BSE was once promoted heavily as a means of finding cancer at a more curable stage because it is a deadly disease that can only be control if detected on time (Reeder & Vogel, (2008). The World Health Organization (WHO), US National Cancer Institute and the Canadian Task Force on Preventive Health Care and many other scientific organizations recommend breast self examination.

Breast self examination most suggested approach entails that the woman stand in front of a mirror with the torso exposed to view; she looks in the mirror for visual signs of dimpling, swelling or redness on or near the breast. This is usually repeated in several position such as while having hands on the hips and then again with arms held overhead. Women not breastfeeding gently squeeze each nipple to check for any discharge. This approach of breast self examination in order to promote adaptive engagement in the behaviour towards early detection of abnormality. The utility of health action process approach and protection motivation theory for explaining health behaviour change towards poor attitude of breast self examination and possible motivational intervention toward redirecting or changing such

attitude. This paper utilized the motivational and behavioural dynamics of education in addressing the following:

1. Health risk factors of breast cancer.
2. Strengthening healthy action toward breast self examination through Health Action Process Approach (HAPA).
3. Strengthening healthy action toward breast self examination through protection motivation theory (PMT).
4. Reinforcing and maintaining behavioural change/health promotion.
5. Conclusion
6. Recommendations

### **HEALTH RISK FACTORS OF BREAST CANCER**

Breast cancer is a chronic disease that record high mortality rate. It is a disease that can be behaviourally modified to help in its prevention and management. Age and gender as factors are not within our control. Others, especially those related to personal behaviours can be modified; several studies have been carried out on this to exemplified risk factors associated with breast cancer.

According to the International Agency for Research on Cancer (2007), there is sufficient scientific evidence to classify alcoholic beverages as Group 1 carcinogens that causes breast cancer in women. Group 1 carcinogens are substance with the clearest scientific evidence that can cause cancer such as smoking tobacco. The more alcohol a woman drinks, the more likely she is to get breast cancer. Women who carry a harmful BRCA mutation have a 60% to 80% risk of developing breast cancer in their lifetimes. This is based on familial history (Spiegel, Hil & Wamner, 2009). The most common gene mutation is referred to as BRCA 1 and BRCA2 which increase risk of breast cancer. People who have previously been diagnosed with breast, ovarian, uterine or bowel cancer have a higher risk of developing breast cancer in the future (Reeger & Vogel, 2008). There is a relationship between calcium intake and breast cancer, a high dietary intake of calcium showed 33% lower risk of breast cancer and also high calcium intake decreases fat induced epithelial hypo proliferation of mammary gland and chemically induced carcinogenesis (Holloway, 2009; Sulik, 2010). Again, lack of exercise has been linked to breast cancer by the American Institute for Cancer Research (2008). Obesity has also been linked to an increased risk of developing breast cancer by many scientific studies that obese women are more likely to have large tumours, greater lymph node involvement and poorer breast cancer prognosis with 30% higher risk of mortality. The use of hormonal contraception by women and late childbirth also has significant impact on breast cancer risk or occurrence (Gaffied, Culwell & Ravi, 2009). Breathing second hand smoke increased breast cancer risk by 70% in younger, primarily premenopausal women are also women who have received high dose ionizing radiation to the chest have a relative risk of breast cancer between 2.1 to 4.0 (Holloway, 2009). There is a relationship between wearing tight fitted bra and possible breast cancer as a result of tissue and vessels mutation and constriction (Sulik, 2010).

### **STRENGTHENING HEALTH ACTION TOWARD BREAST SELF EXAMINATION (BSE) THROUGH HEALTH ACTION PROCESS APPROACH (HAPA)**

Health behaviour change refers to a replacement of health comprising behaviors to enhance health promotion. The health action process approach is a motivational inclined theory that explains behaviours and provides intervention toward healthy living. The theory is developed

by Ralf Schwarzer. HAPA suggest that the adoption, initiation and maintenance of health behaviour should be conceived of as a structured process including a motivation and volition phases. The former describe the intention formation, while the latter refers to planning and action. The model expresses the particular role of perceived self-efficacy at different stages of health behaviour change (Sutton, 2005). The application of HAPA will follow the stage approach which assumes that change is non-linear but consist of several qualitative steps that reflect different mindset of people.

HAPA is designed as a sequence of the continuous self regulatory process, a goal setting phase (motivation) and a goal-pursuit phase (volition) which is subdivided into pre-action phase and an action phase. This will subsumed self efficacy, outcome expectancies, risk perception as distal predictor intention and action planning to help redirect action toward promoting adaptive behaviour of breast self examination (BSE).

The motivation phase provides a framework for individual to form an intention to either adopt a precaution measures or change risk behaviour (Schwarzer, 2008). The self efficacy and outcome expectancies are seen as the major predictor of intentions. This self efficacy explain an individual belief of ability to carry out the recommended course for action successfully for improved health status, within the contingent of time, resources and values, if an individual believe we can execute a preventive behaviour healthily such an individual will not hesitate to embark on breast self examination in this line of practice. Hence, the tendency of possibility in carrying outcome expectancies entails individual injury on possible consequences or benefits of carrying out an action (Schwarzer, 2008). An average woman who is adequately persuaded on the benefit of breast self examination as early detection of carcinogenic lumps is the only panacea to breast cancer development and other mammary gland infections will adopt such recommendations to stay healthy. It is noted that outcome expectancies may have a strong direct influence than self efficacy only after a sufficient level of experience is attained does self efficacy become more influential in forming an intention (Schwarzer, 2008 & Gochmann, 1997).

The volition phase otherwise called the action phase which comes immediately after intention has been nursed, this will be looked at in three bases – cognitive, behavioural and situational context (Schwarzer, 2008). The cognition explained action plan and action control, the individual after have had nursed healthy intention toward breast self examination instigate and control the action through self-regulatory process under dictated instruction by a health facilitator enhance the need, belief, value and self possibility to carry the action out as adaptive as possible. This is greatly influenced by self-efficacy of the individual since the number and quality of action plans are dependent on one's perceived competence and experience. Once an action has been initiated, it has to be controlled by cognition in order to be maintained. The behavioural context emphasize the adaptive engagement of the action by preventing it from being interrupted and abandoned prematurely due to incompatible competing intentions and time factor this could be sustained by strict follow up, educating on risk predictors and benefit thereto (Sniehotta, Schwarzer, Scholz & Scholz, 2005). The situational context provides the intents of self doubts, barriers and cut of health awareness (Miller & Rollnick, 2012). Self doubts and other barriers need to be removed, the suppression of health detrimental action requires effort and persistence for changing action of poor attitude toward breast self examination, hence health facilitator need to plan or create plan that will be monitored for adoptive engagement. Situational barrier as well as opportunities have to be considered and checked properly to ensure the adaptive engagement of breast self examination. The volition phase contains action plans and action control and is strongly

influenced by perceived self efficacy, but also by perceived situational barriers and support (Schwarzer, 2008 & Sniechotta, Schwarzer, Scholz & Scholz, 2005).

## **STRENGTHENING HEALTH ACTION TOWARD BREAST SELF EXAMINATION THROUGH PROTECTION MOTIVATION THEORY**

Adaptive behavioural change is sustained through adequate motivation. Protection motivation theory (PMT) is propounded by Rogers (1975). Protection motivation theory was significantly created to help clarify fear appeals and is one model that explains why people engage in unhealthy practices and offers suggestions for changing those behaviours. It describes adaptive and in adaptive coping with a health threat as a result of the appraisal process. It outlined four constructs toward behaviour change and these related to breast self examination.

### **Perceived Severity of a Threatened Event**

This explains, that an individual with opinion of the fatality rate of a disease situation will direct action to prevent its incidence (Miller & Rollnick, 2012), Roger, (1975). Cognition is imperative in this context. A woman who has a good knowledge on the health implication of breast cancer in relation to reproductive and family health such as loss of breast, prime death, leaving children young, spread of cancer to other vital organs will adopt behaviour to avoid health risk action and promote breast self examination as its panacea.

### **Perceived Probability of the Occurrence or Vulnerability**

Engaging in related health risk factors of breast cancer such as excessive alcohol consumption, smoking, use of hormonal contraceptives, sedentary lifestyles, obesity and wearing tight fitted bra explained the susceptibility of health condition. A woman with valid perception of being expose to an unhealthy condition will direct action to prevent its occurrence by disengaging in health risk behaviours prone to breast cancer and other mammary gland infections.

### **The Efficacy of the Recommended Prevention Behaviour (The Perceived Response Efficacy)**

Efficacy is the individual expecting that carrying out recommendations can remove the threats (Rogers, 1983). This is in line with outcome expectancies explained earlier in HAPA. A woman who is adequately informed on the benefits to be derived from adaptive breast self examination such as prolonged life, early detection of lumps to promote survival, preventing other mammary gland infection will reinforce attitude and behaviour towards engaging in breast self examination.

### **The Perceived Self Efficacy**

This explains the individual competency to carry out the action (Sniechotta, 2009). Adequate demonstration by health facilitators and all concerned will promote self efficacy. Within the contingent of time, resources, socioeconomic status, values and belief, if an individual believe she can execute the recommended preventive behaviour successfully; such an individual will not hesitate to carry it out. This is in line with women with poor attitude toward breast self examination.

Basically, protection motivation theory is mediating variables whose function is to arouse, sustain and direct protective health behaviour (Boer, Segdel, 1996). According to PMT, environmental and personal factors combine to pose a potential health threat.

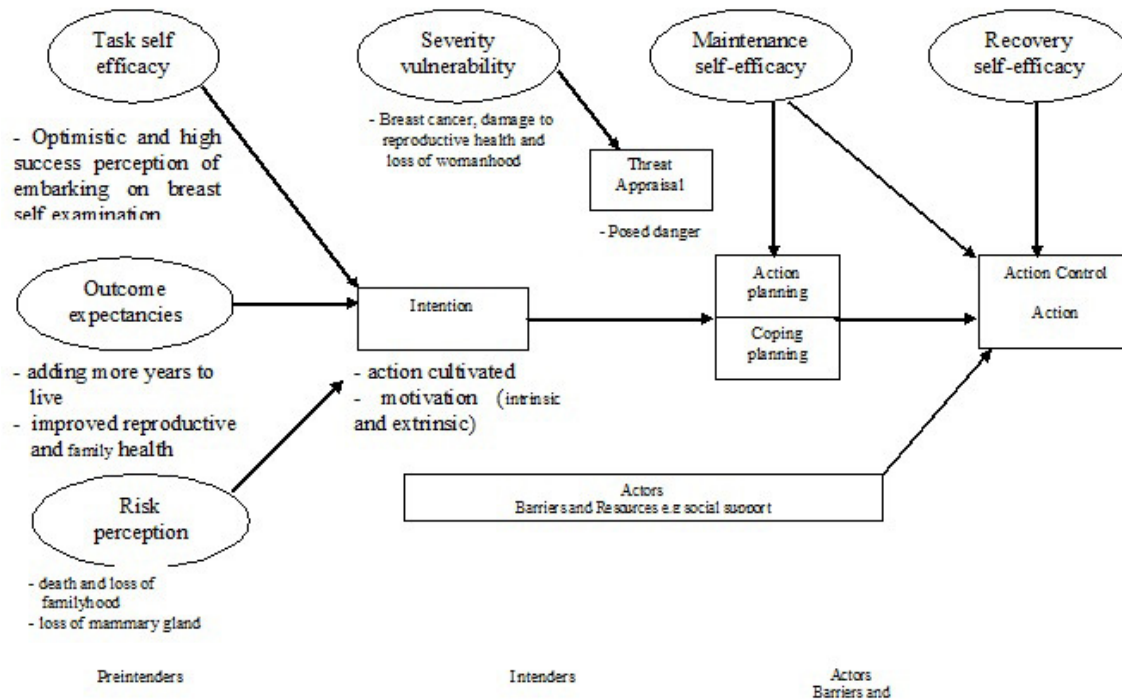


Figure 1. Modified HAPA and PMT to promoting adaptive engagement toward breast self examination (Schwarzer, 2008 and Rogers 1975)

## REINFORCING AND MAINTAINING BEHAVIOURAL CHANGE/HEALTH PROMOTION

Many ill health conditions today are directly and indirectly related to our behaviour, both the communicable and chronic diseases. Breast self examination as behaviour needs to be adopted by every woman adaptively to ensure prompt detection of any abnormality. Health risk factors associated with breast cancer should be avoided, the cognitive and situational context to enhance its adaptive engagement of periodic examination. Good intentions are more likely to be translated into action when people plan, where and how to perform the desired behaviour. Intention fosters planning which in turn facilitate behaviour change (Gochmann, 1997). Parameters to sustain healthy action should be provided i.e. organizational, environmentally, sociologically, this is in line with health education definition (Owie, 2005) as the systematic process of persuading people to adopt healthy lifestyles that will promote their health and reject those that are detrimental to their health using health promotion parameters. Behaviour change must be follow up and maintain to become a habit. A healthy intention toward breast self examination though will start disjointedly but with adequate intrinsic motivation becomes adaptively engaged in. this is imperative to promote reproductive and family health.

## CONCLUSION

In the foregoing pages of this paper, health action process approach and protection motivation theory were critically analyzed to examine its application to redirect action toward periodic or adaptive engagement of breast self examination via motivation and outcome expectancies indices that will help in prompt curative measures and overall reproductive health of the woman. The theories help to create healthy intention and action that are health promotive.

Breast cancer is a deadly disease as prompt attention is the key to survival. Health risk behaviours associated with the disease should be avoided and modified. Basically attention should be given to self efficacy and outcome expectancies which have more intensity to foster adaptive behaviour towards breast examination.

## RECOMMENDATIONS

The following recommendation if adhere to will promote adaptive engagement of breast self examination exemplify from the theories;

1. Females should be encourage in breast self examination through incentives of being persuaded toward the behaviour, hence reinforcing focus toward self efficacy and outcome expectancies.
2. Voluntary and non-voluntary health agencies should periodically organize seminar, conferences and forum to educate on approaches and importance of breast self examination.
3. Habit cultivation and maintenance should be engineered early in life by feeding the curriculum with behavioural concepts and values.
4. Universities should provide room for reproductive health examination unit either administratively or via student union government coordinates by the welfare unit.
5. Marriage counselling should incorporate breast self examination and its teaching to help women practice it.
6. Various interventions provided for promoting healthy behaviour should be evaluated periodically to ascertain progress (Aideyan, Igudia & Owie, 2013).

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