

COPING STYLES AND DEFENSE MECHANISMS UTILISED BY PATIENTS SUFFERING FROM IRRITABLE BOWEL SYNDROME

Raylene Pokroy, MA (RAU)

Aliza Mayer, MA (RAU)

Anita D Stuart, D.Litt. et Phil.
Professor, Department of Psychology
Rand Afrikaans University

H Gertie Pretorius, D.Litt. et Phil.
Professor, Department of Psychology
Rand Afrikaans University

ABSTRAK

Die doel van die navorsing was om vas te stel of mense wat aan Prikkelbare Dermsindroom (PDS) ly, verskil van nie-Prikkelbare Dermsindroom lyers in terme van hulle hanteringsmeganismes en verdedigingsmeganismes. Die navorsing is in twee studies verdeel, naamlik: die eerste het hanteringstyle bestudeer wat gebruik word deur persone wat aan Prikkelbare Dermsindroom ly en die tweede studie het die verdedigingsmeganismes bestudeer in dieselfde groep. Die steekproef het bestaan uit 30 wit vrouens tussen die ouderdomme van 25 en 55 jaar wat gediagnoseer is met Prikkelbare Dermsindroom. 'n Kontrolegroep, bestaande uit 30 wit vrouens in dieselfde ouderdomsgroep, is ook bestudeer. Die resultate dui op 'n statisties beduidende verskil tussen die Prikkelbare Dermsindroom groep en die nie-Prikkelbare Dermsindroom groep soos gemeet deur die "Ways of Coping Questionnaire", die "Defense Mechanisms Inventory (DMI)" en die "Coping Operations Preference Enquiry (COPE)". Die implikasie van die studies mag van groot waarde wees in die nie-farmakologiese bestuur of beheer van Prikkelbare Dermsindroom. Moontlike rigtings vir toekomstige navorsing word voorgestel.

ABSTRACT

The goal of the research was to determine whether people suffering from Irritable Bowel Syndrome (IBS), differ from non-Irritable Bowel Syndrome sufferers in terms of their coping styles and defense mechanisms. The research project was divided into two studies, namely: the first studied coping styles used by Irritable Bowel Syndrome sufferers and the second study focused on the defense mechanisms of the same group. The sample consisted of 30 white women between the ages of 25 and 55 years, diagnosed with Irritable Bowel Syndrome. A control group, consisting of 30 same-aged white women was also stud-

ied. The results show a significant difference between the Irritable Bowel Syndrome group and the non-Irritable Bowel Syndrome group as measured by the Ways of Coping Questionnaire (WCQ), the Defense Mechanisms Inventory (DMI) and the Coping Operations Preference Enquiry (COPE). The implications of these studies may be of great value in the non-pharmacological management or control of Irritable Bowel Syndrome. Possible directions for future research are proposed.

INTRODUCTION

The Gastrointestinal system is very sensitive to emotional disturbances (Wolman, 1988: 111). Gastrointestinal diseases demonstrate the frequent transition from mind to body and vice versa. The intake of food, the loss or gain of weight, poor or good appetite and diarrhoea or constipation can control one's emotional wellbeing and can be controlled by emotions. The psychosomatic disorders of the gastrointestinal system include a great many different pathological patterns such as gastric neuroses, peptic ulcers, ulcerative colitis, encopresis and Irritable Bowel Syndrome (Read, 1985: ix - xi). Although Irritable Bowel Syndrome (IBS) is one of the most common conditions referred to a gastroenterologist, it is one of the least well understood. Part of the reason for this is the lack of consensus of opinion regarding the nature of the complaint (Read, 1985: ix - xi). Today it is widely agreed that Irritable Bowel Syndrome is a psychosomatic disorder, that is a disorder of physiological functioning and anatomical structure, which is determined for most part by psychological factors (Moser, 1986:108).

Gastrointestinal disorders are among the most common of all illnesses; half of the population suffers from acute gastrointestinal diseases every year (Read, 1985: ix). More than 10% have chronic illnesses and these illnesses are a major cause of absenteeism from work. In view of this it is surprising that there is such a paucity of psychological and psychophysiological research focusing on gastrointestinal activity. Perhaps one reason for this is that investigators conceptualise the gastrointestinal tract as a system that is unresponsive to psychological intervention. Another reason may be the widespread belief that adequate techniques are not available for studying gastrointestinal psychology and psychophysiology (Drossman, 1994: xix).

Irritable Bowel Syndrome

The term Irritable Bowel Syndrome describes a cluster of symptoms which include chronic abdominal pain and altered bowel habits (diarrhoea, constipation or alternating diarrhoea and constipation) in the absence of a known structural cause for the symptoms (Toner, Garfinkel, Khursheed, Jeejeebhoy, Scher, Shulhan & Gasbarro, 1990: 149).

Irritable Bowel Syndrome has been considered a diagnosis of exclusion, assigned to patients whose symptoms lack sufficient evidence for an organic etiology. Patients with Irritable Bowel Syndrome often experience pain in the lower abdomen, which is often associated with increased

peristaltic (the co-ordinated, rhythmic, serial contractions of smooth muscle that forces food through the digestive tract) activity in the small intestine and colon. These patients generally suffer from defecatory distress, ranging from extreme constipation to severe diarrhoea. Today the agreed definition of Irritable Bowel Syndrome is as follows: continuous or recurrent symptoms for at least two months of (1) abdominal pain, relieved with defecation or associated with change in frequency or consistency of stool and/or (2) disturbed defecation at least 25% of the time that includes two or more of the following: (a) altered stool frequency, (b) altered stool form (hard or loose/watery), (c) altered stool passage (straining or urgency, feeling of incomplete evacuation), (d) passage of mucus with (e) bloating or feeling of abdominal distension (Walker, Roy-Byrne & Katon, 1990: 565 - 571).

Research has indicated that certain diseases and disorders are related to certain personality types. It is possible that Irritable Bowel Syndrome is one of them (Wolman, 1988: 119).

Research shows that people with Irritable Bowel Syndrome are likely to belong to one of two personality types. Those belonging to the first type are strong and forceful, are competitive and keen to win, fill every moment of their time, have a desire to achieve, use their energy and drive to benefit others and motivate people. They are also conscientious and hardworking, may become easily annoyed or angry, are very conscious of time and tend to go "all out" when they tackle something.

Those belonging to the second type find it difficult to say "no", are perfectionists and hardworking. They are seldom satisfied with their achievements, keep their feelings bottled up inside, are afraid to show anger and hostility and may be impatient and irritable (Wolman, 1988: 120).

These two personality types keep one in a state of constant activity and tension, which causes the body to produce an excess amount of adrenaline and thereby may contribute directly to irritable bowel symptoms (Wolman, 1988: 120).

Until recently, many gastrointestinal disorders were considered partially as a consequence of psychosocial factors. Today, Irritable Bowel Syndrome is possibly the only accepted psychophysiological gastrointestinal disorder (Bennet, 1989: 255 - 279). Noting the high prevalence of emotional and psychological distress in patients with Irritable Bowel Syndrome, Whitehead, Bosmajian, Zonderman, Costa and Schuster (1988: 709) suggested that psychological criteria also be incorporated in the description of Irritable Bowel Syndrome. The role of psychological factors is controversial. Some consider the primary feature to be biological while others consider the psychological factors to play a primary role. However, it is difficult to determine whether the disorder is exclusively biological or psychological (Drossman, 1983: 489 - 492).

The way in which people cope with stress and life events

may have significant effects on their psychological and physical health (Ogden & Von Sturmer, 1984: 772 - 779). Research in the last decade has shown a great deal of evidence that stress, coping strategies and defense mechanisms are related to various psychosomatic complaints, illnesses and diseases (Bennet, 1989: 255 - 276).

Coping styles

Coping refers to "cognitive and behavioural efforts to master, reduce, minimise or tolerate the negative consequences of internal or external demands" (Lazarus & Folkman, 1984: 141). Coping devices are those that indicate minimal disruption and disorganisation. Any device that indicates disequilibrium or dyscontrol is by definition not a coping device (Lazarus & Folkman, 1984: 141).

Coping processes affect adaptional outcomes. The three basic kinds of outcome are functioning in work and social living, morale or life satisfaction and somatic health. Simply put, the quality of life, mental and physical health are tied up with the ways people evaluate and cope with the stresses of living. As the stressful encounter unfolds, coping becomes extremely important as the mechanisms through which a positive sense of well being can be sustained in the face of adverse conditions (Lazarus & Folkman, 1984: 141).

The link between stress, coping and illness is that massive bodily changes are associated with adapting to environmental demands including psychosocial ones. If a person is confronted with stressful demands the body's defense response will increase the risk of any and all disease processes, and if there is no surcease allowing restoration of the cellular conditions necessary for health (e.g. unhealthy coping strategies) the person will ultimately succumb to illness (Read, 1985: 299).

Coping has two functions: the regulation of distress (emotion-focused coping) and the management of the problem that is causing the distress (problem-focused coping). Presumably, coping should fit the situation, such that problem-focused coping should be more appropriate in situations that are amenable to change than in situations that are not. Conversely, emotion-focused forms of coping, such as distancing or positive reappraisal, should be more appropriate in situations where nothing can be done than in situations that are changeable. Coping effectiveness in a specific encounter is based on both functions. Thus, for coping to be effective, there must be a match or fit between coping effort and the demands of the situation (Lazarus & Folkman, 1984: 140).

Defense mechanisms

Defense mechanisms are largely unconscious reactions that protect a person from unpleasant emotions such as anxiety and guilt. Freud (1926/1959: 163) describes defense mechanisms as those techniques used by the ego to resolve conflict. The conflict is resolved by a process whereby the ego attacks, distorts or becomes selectively unaware of certain aspects of the internal or external world (Ihilevich & Gleser, 1993: 1). Defense mechanisms are

imbedded in the social representation of various actions and conceptions and they are crucial in coping with reality, yet the individual is not conscious of the fact that he or she is using them (Meyer, Moore & Viljoen, 1989: 51 - 55). In this sense, defenses are adaptive - they allow the individual to continue to function in anxiety-arousing situations. When used excessively, defenses may distort reality (Cramer, 1987: 597 - 614).

Whether defenses deployed are considered pathological depends on the degree of use and on the extent of reality distortion involved. To explain individual differences in mode and expression of repressed material, psychoanalysts have suggested that one's personality, biological vulnerabilities and unique conflicts all play a role (Meyer, Moore & Viljoen, 1989: 51 - 55).

PROBLEM STATEMENT

Research indicated that it is the way one copes with stress, and not stress per se, that influences one's psychological health and somatic well-being. Differences in coping styles and defense mechanisms can distinguish between those who learn to manage stress responses effectively, and those who succumb to its deleterious effect and develop psychosomatic symptoms (Folkman, Lazarus, Gruen & DeLongis, 1986: 571 - 579). The role that coping styles and defense mechanisms play in the development of Irritable Bowel Syndrome forms the cornerstone of the present research.

In recent years coping and defense mechanisms have been researched and implicated in the development of headaches (Tellegen & Sorbi, 1988: 351), coronary heart disease (Peglar & Borger, 1984: 669) and hypertension (Bekker, Hentschel & Reinsch, 1993: 142 - 169). Yet there has been little research on coping and defense mechanisms and Irritable Bowel Syndrome. The question thus arises whether people who suffer from Irritable Bowel Syndrome utilise different coping styles and defense mechanisms from healthy people.

GOALS AND OBJECTIVES OF THE STUDY

The study aims at investigating the possible coping styles and defense mechanisms used by Irritable Bowel Syndrome patients and healthy subjects from a similar population. Generally, the aim of the present research is to contribute to the existing literature on Irritable Bowel Syndrome. This research can add to the theory building of Irritable Bowel Syndrome and thereby facilitate greater understanding of Irritable Bowel Syndrome.

RESEARCH DESIGN AND METHODS

Data collection

The first study utilised one measuring instrument, namely the Ways of Coping Questionnaire. This questionnaire assesses thought and actions individuals use to cope with

the stressful encounters of everyday living. It is derived from a cognitive phenomenological theory of stress and coping that is articulated in stress, appraisal and coping (Lazarus & Folkman, 1984: 141).

The Ways of Coping Questionnaire has been used primarily as a research instrument in studies of the coping process. Researchers have used it to investigate the components and determinants of coping in a variety of studies. The questionnaire is conceived as a strategy for measurement rather than, strictly speaking, a test.

The Ways of Coping Questionnaire has eight sub-scales, namely: Confrontive Coping, Distancing, Self-controlling, Seeking Social Support, Accepting Responsibility and Escape Avoidance, Planful Problem Solving and Positive Reappraisal.

The second study utilised two measuring instruments, namely the Defense Mechanisms Inventory (DMI) and the Coping Operations Preference Enquiry (COPE). The DMI is a paper and pencil test which purports to measure the relative intensity of usage of five major groups of defenses. The inventory consists of 10 brief stories, two per conflict area, followed by four questions regarding the subject's actual behaviour, fantasy behaviour, thoughts and feelings in the situations described. Five responses typifying the five defenses (i.e. turning-against-object, projection, principalisation, turning-against-self and reversal) are provided for each question, from which subjects select the one most representative and the one least representative of his reaction.

COPE measures the preference one has for using each of five coping mechanisms: denial, isolation, projection, regression and turning against the self. Assuming that one copes with anxiety in a characteristic way, COPE measures the specific technique or techniques the person prefers. The instrument is not concerned with the amount of defensiveness or the quantity of coping that is exhibited. It simply asks, "When you do cope, how do you do it?" COPE, therefore, is not a measure of pathology or of health. It is simply a description of how one functions in this area (Schutz, 1977: 50).

Analysis of data

Three main statistical techniques were used in the statistical analysis. Hotelling's T-square test was used to ascertain whether the vector of averages of the two contrasting groups differed significantly or not. Student's T-Test was applied to ascertain significant differences between mean scores, and the F-test was used to determine whether the variances of the two independent groups were homogeneous or not.

Hotelling's T-square is related to Mahalanobis D-square, and both have an associated F-value. The significance of the F-values was determined by the F-tables. For the purpose of this study the ruling criteria was set at 0,05. If Hotelling's T-square is statistically significant, then it can be deduced that the two vectors of averages differ statistically significantly. By making use of t-tests, the analytical

procedure can then be expanded to determine how and where the groups differ.

Population and sample

Participants for the study were drawn from a number of sources, namely by placing an article in a local Afrikaans newspaper ("Die Beeld") and a local Afrikaans magazine where a brief synopsis of Irritable Bowel Syndrome and the research project was outlined. Secondly, dieticians in the Gauteng area were contacted telephonically and asked to refer any Irritable Bowel Syndrome patients to the project. Thirdly, a letter was sent to a number of gastroenterologists and general practitioners in the Gauteng area explaining the purpose of the study and asking for referrals. Fourthly, an article was placed in the Medical Chronical, discussing the Irritable Bowel Syndrome research project. It informed doctors about the Irritable Bowel Syndrome clinic at the Rand Afrikaans University and asked for referrals. The public referred other participants.

The subjects for the present study are patients who have been diagnosed as suffering from Irritable Bowel Syndrome by medical doctors. All other organic illnesses had been eliminated. The doctors used various methods of diagnosis, amongst others, the method proposed by Drossman (1994: 120 - 121). The criteria were defined as follows: Continuous or recurrent symptoms for at least three months of (1) abdominal pain, relieved with defecation or associated with change in frequency or consistency of stool and/or (2) an irregular (varying) patterns of defecation at least 25% of the time that includes two or more of the following: (a) altered stool frequency, (b) altered stool form (hard or loose/watery), (c) altered stool passage (straining or urgency, feeling of incomplete evacuation), (d) passage of mucus with (e) bloating or feeling of abdominal distension (Drossman, 1994: 120 - 121).

The subjects ($n = 30$) were females between the ages of 25 and 55 years, as the onset of Irritable Bowel Syndrome occurs in early adulthood and is rare after 60 years (Sandler, 1990: 409 - 415). No male subjects were used as part of the research. This was based on the findings of Walker et al. (1990: 565 - 571), that Irritable Bowel Syndrome affects twice as many females as males. All the subjects were white, as these are the people who presented to participate in the study. A total number of 30 controls were obtained randomly from the public. They were asked to participate in the study as controls. They completed the Irritable Bowel Syndrome client questionnaire to ensure that they did not suffer from Irritable Bowel Syndrome. All the controls were white females between the ages of 25 - 55 years old.

VALIDITY AND RELIABILITY

Reliability

Reliability for the Ways of Coping Questionnaire can be evaluated by examining the internal consistency of the

coping measures, estimated with Cronbach's coefficient alpha (Folkman & Lazarus, 1988: 466 - 475). Internal consistency estimates of coping generally fall at the low end of the traditionally acceptable range. The alpha coefficient for the eight scales, ranging from .61 to .79 are higher than the alphas reported for most other measures of coping processes (Folkman & Lazarus, 1988: 466 - 475).

Test-retest reliability for the Defense Mechanisms Inventory has been reported to range from .69 to .93 (Ihilevich & Gleser, 1993: 43 - 46).

With regard to the reliability of the Coping Operations Preference Enquiry, no exact data could be obtained. By contacting the supplier of the test in South Africa, the publishers of the test (Mind Garden, California) and Will Schutz (Ph.D in Psychology and author of more than 30 journal articles on scientific method and interpersonal relations) the reliability of the COPE was accepted.

Validity

The items on the Ways of Coping Questionnaire have face validity since the strategies described are those that individuals have reported using to cope with stressful situations (Folkman & Lazarus, 1988: 466 - 475). Evidence of construct validity is found in the fact that the results of studies are consistent with the theoretical predictions namely: (1) coping consists of both problem-focused and emotion-focused strategies and (2) coping is a process (Folkman & Lazarus, 1988: 466 - 475).

The validity of the Defense Mechanisms Inventory has been demonstrated by a host of studies (summarized in the DMI manual, Ihilevich & Gleser, 1993: 71 - 96).

With regard to the Coping Operations Preference Enquiry the same process was used to accept validity as was used to establish reliability.

RESULTS

The results of the first study were as follows:

According to Hotelling's T-squared test there are statistically significant differences ($p = 0,0178$) in the vectors of averages between the subjects in Groups 1 (IBS subjects) and the non-IBS clients in Group 2, with regard to the Ways of Coping sub-scale taken together.

The differences between the two groups occurred only in the Escape-Avoidance sub-scale score ($p = 0,0006$). There were no statistically significant differences between the two groups with reference to the Confrontive Coping sub-scale scores, Distancing, Self-Controlling, Seeking Social Support, Accepting Responsibility, Planful Problem Solving and Positive Reappraisal sub-scale scores.

The results of the second study were as follows:

According to Hotelling's T-squared test there were statistically significant differences ($p = 0,0442$) in the vectors of averages between the IBS subjects and the non-IBS clients with regard to the DMI sub-scales taken together.

The differences between the two groups occurred only in the Turning-Against-Self sub-scale score ($p = 0,0022$).

There were no statistically significant differences between the two groups with reference to the other sub-scale scores.

According to Hotelling's T-square test there were no significant differences ($p = 0,0997$) between the groups with regard to the COPE sub-scale scores ($p = 0,0997$) taken together, although two of the sub-scales, Denial and Turning-Against-Self, were found to be statistically significant ($p = 0,0246$ and $p = 0,0536$).

There was only one statistically significant difference obtained between the two groups. Group 1 (IBS patients) had a higher score on the Escape-Avoidance sub-scale ($X = 9,9333$) as measured by the Ways of Coping Questionnaire, compared to the control group of non-IBS clients ($X = 5,5333$). The p -value ($p = 0,0006$) is statistically significant. No other statistically significant differences were found between the two groups in terms of the other seven sub-scales of the Ways of Coping Questionnaire. Nevertheless this does not detract any value from the significance of the Escape-Avoidance sub-scale.

Therefore, individuals who use this type of coping style avoid threatening information and tend to keep unpleasant experiences out of their consciousness. Deterioration of health is more likely to be found among individuals who use escape-avoidance behaviour (Denollet, 1991: 538 - 556).

In the present research, escape-avoidance behaviour was used significantly more by the Irritable Bowel Syndrome patient group than any of the other coping styles. The literature supports the view that escape-avoidance behaviour plays a significant role in the development of other disorders, for example, heart disease (Bekker, Hentschel & Reinsch, 1993: 142 - 169). It seems that Irritable Bowel Syndrome can now be added to this list.

Since people with Irritable Bowel Syndrome do not confront or deal effectively with their stress but rather consciously try to avoid or escape the problem, their stress is subconsciously internalised and is expressed via the gastrointestinal system. This could possibly lead to the development of Irritable Bowel Syndrome.

There was only one statistically significant difference ($p = 0,05$) obtained between the two groups. The subjects (IBS patients) had a higher score on the Turning-Against-Self sub-scale ($X = 44,0333$) as measured by the DMI, compared to the control group ($X = 37,6$). The p -value ($p = 0,0022$) is statistically significant. No other statistically significant differences were found between the two groups in terms of the other four sub-scales of the DMI. Nevertheless this does not detract any value from the significance of the Turning-Against-Self sub-scale.

In terms of the COPE, only one sub-scale, Denial, was found to be statistically significant ($p = 0,0246$), although the Turning-Against-Self was significant at the 0,1 level of significance. This means that the Irritable Bowel Syndrome patients preferred to use denial (and possible turning against the self) rather than any other defense mechanism. However, this cannot be interpreted because the Hotelling's T-squared test is not significant ($p = 0,0997$).

People suffering from Irritable Bowel Syndrome use Turning-Against-Self as a means of coping with their stress. They do not confront or deal effectively with their aggression but rather turn their aggression inward towards themselves. This aggression and anxiety is internalised and is expressed via the gastrointestinal system. This could possibly lead to the development of Irritable Bowel Syndrome.

The results obtained from this study indicate that Irritable Bowel Syndrome patients interact negatively with their environment. They use "unhealthy" defense mechanisms, which contribute to the development of Irritable Bowel Syndrome. This is in line with the fact that there is no known medical cause or cure for the disorder.

CONCLUSION AND IMPLICATIONS

From the literature as well as the present studies, it can be seen that Irritable Bowel Syndrome can be associated with unhealthy coping styles and defense mechanisms. Although Irritable Bowel Syndrome may not be directly produced by unhealthy coping styles, they seem to play a central role in the development of Irritable Bowel Syndrome.

The results of this study strongly suggest that Irritable Bowel Syndrome can be controlled or ameliorated by learning to deal more effectively with stress, as this would reduce the internalisation of stress and lessen the likelihood of the development of Irritable Bowel Syndrome. An approach aimed at improving the individual's capacity to cope with stress may have an important role in the long-term management of Irritable Bowel Syndrome.

The results of this study indicated that people suffering from Irritable Bowel Syndrome predominantly used escape-avoidance and turning-against-self as a way of coping with life's stresses and demands. Escape-avoidance behaviours are efforts to escape or avoid the problem, which can include wishful thinking (Folkman & Lazarus, 1988: 466 - 475). Turning-Against-Self is an intrapunitive defense style which is used for the purpose of reducing perceived threats to one's self-esteem (Hilevich & Gleser, 1993: 19). Since there are healthy coping styles for individuals to use in stressful situations, therapeutic intervention should focus on stress coping training, whereby these healthy coping styles can be employed. Examples of healthy and positive coping styles are: planful problem solving which are deliberate problem-focused efforts to alter the situation, coupled with an analytical approach to solving the problem; positive reappraisal

which are efforts to create positive meaning by focusing on personal growth; seeking social support which are individual efforts to seek informational, tangible or emotional support; accepting responsibility which is the acknowledgement of one's own role in the problem with a commitment to trying to put things right, and self-controlling which are efforts to regulate one's feelings and actions.

The finding that a negative or unhealthy coping style (e.g. Escape-Avoidance behaviour and Turning-Against-Self) plays a statistically significant role in patients with irritable bowel syndrome suggests that Irritable Bowel Syndrome is a result of a life-style, that is, how one copes with stressful life events. It can therefore be prevented or treated effectively by stress coping training which facilitates the use of healthy coping styles.

In conclusion, the present study shows that escape-avoidance and turning-against-self behaviour plays a central role in the development of Irritable Bowel Syndrome. These behaviours have been implicated in the development of other disorders such as migraine and heart disease (Tellegen & Sorbi, 1988: 351 - 358). Therefore one can conclude that stress coping training emphasising the use of healthy coping styles may be of value in the treatment and therapeutic intervention of irritable bowel syndrome. Indeed, it may turn out to be the most important in the non-pharmacological treatment of Irritable Bowel Syndrome.

The present research is not without its limitations, particularly with regard to the small sample sizes of Irritable Bowel Syndrome patients. An all white sample was used and is not representative of the South African population. Due to this, these findings cannot be generalised to a more ethnically diverse group. However, it constitutes a preliminary attempt to understand which coping styles and defense mechanisms are utilised by patients suffering from Irritable Bowel Syndrome.

Further issues that can be explored are: Intervention studies should be conducted to determine if coping styles and defense mechanisms can in fact be changed, and if the changes produce benefits to health, psychological well-being or other appropriate criteria. Such interventions should employ measures of personality in order to provide data on whether some individuals are more prone than others to learn, use and benefit from more effective coping styles and defense mechanisms. In South Africa, very little research exists on Irritable Bowel Syndrome amongst the Black, Coloured and Indian populations. More research on Irritable Bowel Syndrome in these population groups would be beneficial. Further research is necessary on improving non-pharmacological management of Irritable Bowel Syndrome. It is also necessary that this study be replicated utilising larger subject populations in order to test the hypotheses formulated in this study.

REFERENCES

- BEKKER, FJ; HENTSCHEL, U & REINSCH, M 1993: Attitudes towards illness & health & defense mechanisms in psychosomatic patients. (In: Hentschel, U; Smith, G; Ehlers, W & Draguns, JG eds 1993: The concept of defense mechanisms in contemporary psychology. New York: Springer-Verlag, pp. 142 - 169.)
- BENNET, P 1989: Gastroenterology. (In: Broome, AK ed. 1989: Health Psychology. London: Chapman & Hall, pp. 255 - 276.)
- CRAMER, P 1987: The development of defense mechanisms. *Journal of Personality*, 55(4): 597 - 614.
- DENOLLET, J 1991: Negative affectivity & repressive coping: Pervasive influence on self-reported mood, health and coronary behaviour. *Psychosomatic Medicine*, 53: 538 - 556.
- DROSSMAN, DA 1983: Patients with the Irritable Bowel Syndrome: Seeing the Forest for the trees (or how not to bark up the wrong tree). *Journal of Clinical Gastroenterology*, 5: 489 - 492.
- DROSSMAN, DA 1994: The functional gastrointestinal disorders. Diagnosis, Pathophysiology & Treatment. A multinational consensus. New York: Little, Brown & Company.
- FOLKMAN, S; LAZARUS, RS; GRUEN, RJ & DELONGIS, A 1986: Appraisal, coping, health status & psychological symptoms. *Journal of Personality & Social Psychology*, 50: 571 - 579.
- FOLKMAN, S & LAZARUS, RS 1988: Coping as a mediator of emotion. *Journal of Personality & Social Psychology*, 54: 466 - 475.
- FREUD, S 1959: Inhibitions, symptoms and anxiety (In: Strachey, J ed. The standard edition of the complete psychological works of Sigmund Freud. Vol. 3. London: Hogarth Press, pp. 77 - 174.)
- HAYNES, SN & GANNON, L 1981: Psychosomatic disorders: A Psychophysiological approach to etiology and treatment. New York: Praeger.
- IHILEVICH, D & GLESER, GC 1993: Defense mechanisms. Their classification, correlates & measurement with the Defense Mechanisms Inventory. USA: Psychological Assessment Resources.
- LAZARUS, RS & FOLKMAN, S 1984: Stress, appraisal & coping. New York: Springer.
- MEYER, WF; MOORE, C & VILJOEN, HG 1989: Personality theories from Freud to Frankl. Johannesburg: Lexicon.
- MOSER, RS 1986: Irritable Bowel Syndrome: A misunderstood Psychophysiological Affliction. *Journal of Counselling and Development*, 65: 108 - 109.
- OGDEN, JA & VON STURMER, GV 1984: Emotional Strategies and their relationship to complaints of psychosomatic and neurotic symptoms. *Journal of Clinical Psychology*, 40: 772 - 779.
- PEGLAR, M & BORGER, FH 1984: The defense mechanisms of coronary patients. *Journal of Clinical Psychology*, 40: 669 - 679.
- READ, NW 1985: Irritable Bowel Syndrome. London: Grune & Stratton.
- SANDLER, RS 1990: Epidemiology of Irritable Bowel Syndrome in the United States. *Gastroenterology*, 99: 409 - 415.
- SCHUTZ, W 1977: Leaders of schools: FIRO theory applied to administrators. California: University Associates, Inc.
- TELLEGEN, B & SORBI, M 1988: Stress-coping in migraine. *Social Science & Medicine*, 26: 351 - 358.
- TONER, BB; GARFINKEL, PE; KHURSHEED, C; JEE-JEEBHOY, N; SCHER, H; SCULHAN, D & GASBARRO, I 1990: Self-schema in Irritable Bowel Syndrome & Depression. *Psychosomatic Medicine*, 52: 149 - 155.

WALKER, EA; ROY-BYRNE, PP & KATON, WJ 1990: Irritable Bowel Syndrome & Psychiatric Illness. **American Journal of Psychiatry**, 147: 565 - 571.
WHITEHEAD, WE; BOSMAJIAN, C; ZONDERMAN, AB; COSTA, PT & SCHUSTER, MM 1988: Symptoms of

psychologic distress associated with Irritable Bowel Syndrome: Comparison of Community & Medical Clinic Samples. **Gastroenterology**, 95: 709 - 714.
WOLMAN, BB 1988: Psychosomatic Disorders. New York: Plenum.

REPORT OF VISIT TO HARARE: 27 APRIL TO 15 MAY 1998

Dr Valerie Ehlers, Department of Advanced Nursing Sciences, Unisa.

The World Health Organisation (WHO) and the Commonwealth offered a joint workshop for nurses and midwives from the RSA, Mocambique, Zimbabwe, Zambia and Uganda lasting three weeks. Three nurses from the RSA, namely Mrs Mamorwa Gololo from the South African Municipal Workers' Union, Mrs Elza Lubbe from George Hospital and Dr Valerie Ehlers from Unisa, participated in this workshop in Harare.

The primary objective of the workshop was to strengthen the research capabilities of nurses and midwives involved in rendering reproductive health (RH) services. Thus two aspects were addressed throughout the workshop, namely updating the participants' knowledge about RH issues in the African region and improving their research capabilities, including their statistical capabilities and computer skills, especially the use of the EPI-INFO computer programme.

The workshop's co-ordinators came from Nigeria, Tanzania, the Cameroon and from the WHO's head office in Geneva, Switzerland. Facilitators from the University of Zimbabwe, Harare, included professors from the Department of Obstetrics and Gynaecology, the Department of Public Health, the Department of Epidemiology, and the Department of Sociology.

From Monday till Friday lectures and/or group discussions were conducted from 08:30 until 17:00. During the evenings the representatives from each country were expected to draft their combined research proposal for the country concerned. Two delegates, from two different countries, had to write the minutes of each full day's proceedings. On Saturdays computer practice sessions were provided. Group outings were organised for Sundays.

The three-week workshop concluded with a post-test comparing the delegates knowledge with that displayed during the pretest written at the commencement of the workshop. The organisers were pleased with the progress displayed by the workshop participants. During the last few days each country had to present its research protocol to the whole group for discussion and review. Repeated refinements resulted from these exercises. Each country's delegates left Harare with a proposal for research to be conducted in the country concerned about some aspect of RH.

Subsequent to attending the workshop in Harare, each country's participants were expected to:

- submit a refined research proposal with a detailed budget of expected expenditures within four weeks (this was done by the South African delegation)
- conduct this research and submit a written report within one year (the South African delegation hopes to conduct the actual research early during 1999), and
- share the information obtained in Harare with nurses and midwives from their country. In order to meet this last requirement, a report has been published in *Health & Hygiene* (vol 9, no 10:17-19), emphasising the role which primary health care providers can play in supplying emergency contraceptive services. The information obtained from the planned research will be published widely. Finally, a similar workshop is planned for the nurses and midwives of the RSA, possibly during September 1999.

Much knowledge was gained during the three weeks in Harare, but the greatest benefit involved the co-operation with nursing colleagues from other African countries. All the delegates seemed to experience staff shortages, financial restrictions, inadequate medical supplies and communication problems with health care workers, including doctors, from foreign countries. During the three weeks, the participants became acutely aware of the lack of communication among the nurses from the African continent, as no African Journal for Nurses and Midwives exists. This communication problem is further compounded by the fact that the nurses of Africa do not all understand English - in a number of African countries the official languages are Portuguese or French. The education of nurses in some African countries seems to be modelled on the legacies of the previous colonisers rather than on the health and nursing needs of the specific countries. Nurses and health care planners should address these issues in order to succeed in rendering meaningful nursing care to the people of Africa.

I wish to thank the WHO and the Commonwealth for organising this workshop and for financing it. The Department of Health of the RSA and FUNDISA are thanked for approving my participation in this workshop. Mrs Mamorwa Gololo and Elza Lubbe are thanked for their active participation throughout the workshop and especially for portraying the RH situation in the RSA to the delegates from the other African countries. Finally, my colleagues at the Department of Advanced Nursing Sciences, Unisa, are thanked for enabling me to participate in this workshop despite their extremely full schedules during 1998.

Reference

Ehlers, V 1998. Joint World Health Organisation (WHO) and Commonwealth Workshop for Nurses and Midwives: Harare, 27 April to 15 May 1998. **Health & Hygiene**, 9 (10):17-19.