RELATIONSHIP OF BURNOUT AND SOCIAL SUPPORT

IN NURSES WHO CARE FOR PEOPLE WITH AIDS

by

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B.A. (Hons), University of Manitoba, 1987

THESIS SUBMITTED IN PARTIAL FULFILLMENT OF

THE REQUIREMENTS FOR THE DEGREE OF

MASTER OF ARTS

Department

of

Psychology

Susan M. Driedger 1989

SIMON FRASER UNIVERSITY

December 1989

APPROVAL

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Degree: Master of Arts

Title of thesis: Relationship of Burnout and Social Support
                  in Nurses Who Care for People With AIDS

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Relationship of Burnout and Social Support

in Nurses Who Care for People With AIDS

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Abstract

This study examined the effect of social support
on burnout in nurses of People with AIDS (PWAs).

A sample of 80 female registered nurses (RNs)
completed the House and Wells Social Support
Questionnaire, which measures supervisor, co-worker,
friend/relative, and spouse/partner support, and the
Maslach Burnout Inventory, which defines burnout in
terms of Emotional Exhaustion, Depersonalization, and
Personal Accomplishment. The experimental group (AIDS-
high) consisted of 34 nurses who care for PWAs on a
daily basis in the course of caring for patients who
require acute non-surgical medical care. The control
group (AIDS-low) consisted of 40 nurses who provide
pre- and post-operative care for patients requiring
surgery.

The two groups were not significantly different
according to their univariate statistics, however, a
regression analysis revealed significantly different
patterns of results between groups. Lack of experience
(age and the number of years worked as an RN) was
significantly predictive of burnout in AIDS-low nurses,
but not in AIDS-high nurses. Contrary to predictions,
the three components of burnout were not significantly
associated with the four sources of social support for

either the AIDS-high nurses or the AIDS-low nurses. Work-related social support was not more strongly associated with the burnout variables in AIDS-high nurses than in AIDS-low nurses.

In conclusion, the use of social support was not associated with burnout for AIDS-high nurses, however, experience was observed to be a strong predictor of burnout for AIDS-low nurses.

ACKNOWLEDGEMENTS

There have been some exciting and also some trying moments in the preparation of this study, for myself and for those who've been around me at those times, and I have many people to thank for helping me bring this all together.

First of all, I sincerely thank David for his support and assistance, for his enthusiasm in my project, and for his unfailing belief in my ability to make it through all of this.

I would like to thank Marilyn Bowman for the care and attention with which she read the drafts of this manuscript, and for her invaluable suggestions regarding the preparation of this manuscript.

My thanks to David Lawson who was instrumental in helping me find a feasible way in which to conduct this sometimes politically delicate research.

Special thanks go to Ray for his careful consideration of my statistical method and results above and beyond the call of duty.

My thanks go out, as well, to Lori Tarcea who always had a smile and a solution for me when I thought that the paperwork had finally got the best of me.

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CHAPTER I

INTRODUCTION

The presence of AIDS in society has affected the
lives of nurses at many different levels, both
personally and professionally. AIDS is unique because
of the nature of the disease and its prognosis. In
addition to the fear of contagion, despite the use of
universal precautions, there are a variety of
psychosocial issues to be faced. Caring for People
with AIDS (PWAs) has been rated by some nurses as the
most stressful area of nursing today (Sherr & George,
1988), especially in hospitals where AIDS is rarely
encountered and where it thus remains a foreign and
threatening syndrome of diseases (O'Donnell, O'Donnell,
Pleck, Snarey, & Rose, 1987). Prior to the
introduction of AIDS into society, cancer patients were
typically the most stigmatized of patients. In
comparison to individuals with heart disease, diabetes,
cancer, AIDS patients are now judged the least socially
acceptable, the most responsible for their illness, and
of the least moral worth (Katz, I., Hass, R.G., Parisi,
N., Astone, J., McEvaddy, D., & Lucido, D.J., 1987).
Nurses are much more negative attitudinally towards,

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and much less willing to interact with, a patient labelled as a PWA than towards a patient who has been described with the same symptoms, but who has been labelled as a leukemia patient (Kelly, 1988; Kelly, J.A., St. Lawrence, J.S., Hood, H.V., Smith, S., & Cook, D.J., 1988). Furthermore, it has been reported in one study that 75% of nurses would refuse to care for an AIDS patient in certain circumstances (Moriarty, 1988).

It appears that underlying the negative attitudes towards AIDS patients is the perception that they are responsible for contracting the human immunodeficiency virus (HIV) (Katz et al., 1987). When the causality of an illness is based in moral language, those afflicted with the illness tend to be blamed for having it (Kayal, 1985). Such moral judgements may create barriers which may prevent nurses from hearing and retaining information necessary for the care of the stigmatized patient (Scheitinger, McCarthy, Gillen, & Hammrich, 1988).

Stigmatized by association

Nurses who care for AIDS patients may feel that they become stigmatized by association (Bolle, 1988;

Govoni, 1988; Holland & Tross, 1985; Kelly, 1988) and
this perception of stigmatization can isolate these
nurses from their peers (Kelly, 1988). Nurses' friends
and families are often unsupportive, judgemental, and
frightened to have the nurse caring for PWAs
(Blumenfield, Smith, Milazzo, Seropian, & Wormser,
1987; Bolle, 1988; Butler & Lynch, 1988). AIDS is
still seen predominantly as a 'gay disease', and most
nurses, in general, blame the PWAs for their illness
(Andre, 1988), despite assurances from the Kinsey
Institute that the HIV virus is an 'equal opportunity'
virus which can be transmitted via the exchange of
blood or semen, regardless of one's nominal sexual
preferences (Reinisch, Sanders, & Ziemba-Davis, 1989).
Prejudice against gays is a major factor in AIDS phobia
(O'Donnell, et al., 1987). Gays have been as strongly
stigmatized as PWAs have been, and it has been
suggested that both groups are considered
interchangeable and nearly identical (Kelly et al.,
1988). In addition to the stigma attached to
homosexuality, there is a stigma associated with
terminal illness, and with being an IVDU (intravenous
drug user), let alone with having AIDS (Knox & Dow,
1989).

Mortality issues

In addition to the issues surrounding sexuality, nurses also are faced with the lethality of AIDS (O'Donnell, et al., 1987) and their own mortality (Bolle, 1988; Flaskerud, 1987; Govoni, 1988). Both AIDS and oncology nurses confront the helplessness and frustration of caring for terminally ill patients (Dilley, Ochtill, Perl, & Volberding, 1985; Flaskerud, 1987; Govoni, 1988; Kelly, 1988), and both types of nurses find themselves fighting against becoming demoralized by the high rate of mortality and the repetitive grieving (Bolle, 1988; Flaskerud, 1987). Fear of death in and of itself has been reported to significantly predict burnout (Hare, Pratt, & Anderson, 1988). Nurses of AIDS patients often identify strongly with their patients due to the similarity in their ages (O'Donnell et al., 1987), and consequently they may become over-involved with their patients (Flaskerud, 1987; Govoni, 1988). They may carry a heavy emotional burden in watching so many of their young patients waste away (Kelly, 1988; McLeod, Smith, & Willoughby, 1986). The emotional and physical needs of the patient can become overwhelming and cause the nurse to become stressed and fatigued (Flaskerud, 1987; Salisbury,

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1986). Although some nurses report having experienced
growth as a response to the existential challenge of
caring for PWAs (Bolle, 1988; Govoni, 1988), these
mortality issues put nurses at risk of exhaustion and
burnout as they are repeatedly confronted with their
inability to cure.

Frustration associated with AIDS care

The type of care required by an AIDS patient is
not substantially different from that required by any
cancer or critical care patient (Rosenthal & Haneiwich,
1988). The perception of powerlessness is a major
source of dissatisfaction when caring for a patient
with an uncertain prognosis, or when administering
treatments which are not always helpful. Nurses, in
general, can end up feeling frustrated, incompetent,
and can suffer from self-recrimination for past and
potential future failures (Bush, 1988; Pot-Mees, 1987;
West, Horan, & Games, 1984). AIDS nurses also report
feeling overworked from trying to meet all immediate
acute care demands of AIDS patients in the face of time
constraints (Flaskerud, 1987; Pot-Mees, 1987; West et
al., 1984), although they have been found to exaggerate
the amount of care required by PWAs (O'Donnell et al.,

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1987). Furthermore, it has been reported that staff may feel as uncomfortable with hepatitis B patients as with AIDS patients, suggesting that the fear of contagion plays a large part in the role of the stigma associated with PWAs (Knox & Dow, 1989).

Fear of contagion

It has been well-documented that the risk to health-care workers who care for people with AIDS is minimal (Reisman, 1988; Richardson, Lochner, McGuigan, & Levine, 1987; Sherr, 1987; Treiber et al., 1987), and it is equally well-documented that nurses continue to fear contagion (Andre, 1988; Brennan, 1988; Dilley, et al., 1985; Holland & Tross, 1985; Kelly, 1988; Knox & Dow, 1989; O'Donnell & O'Donnell, 1987). Given the lethal consequences of contracting the HIV virus, contagion is a legitimate fear. Fear of contagion has been found to interfere with the caregiver's ability to objectively evaluate the risk of contagion in the care of oncology patients (O'Donnell et al., 1987). Similarly, within the realm of AIDS care, factual information has been resisted and guarantees of safety have been requested (Butler & Lynch, 1988). The fear of contagion has been reinforced by changes in the

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information available regarding AIDS and the transmittance rates of the HIV virus (Bolle, 1988; Friedland, 1988; Salisbury, 1986). Needlestick injuries have a significant emotional effect on nurses, whether they result in transmission of the virus or not (Marrie, MacIntosh, & Streight, 1989). Nurses are afraid because they think that the risk of occupational exposure has been downplayed (Gerbert, Maguire, Badner, Altman, & Stone, 1988).

Universal precautions are a source of stress for nurses not only because universal precautions are not perceived to be a guarantee against contagion (Gerbert et al., 1988) but also because they prevent nurses from delivering direct patient care (Pot-Mees, 1987). Universal precautions require the nurse to wear gloves, gown, hat, and mask when caring for patients with highly infectious diseases or with compromised immune systems. These barriers to infection also create barriers between nurse and patient when the nurse cannot use touch to comfort the patient (Pot-Mees, 1987).

Education and social support are most often prescribed for nurses who are encountering stress from caring for PWAs. Nursing inservice programs have been

reported to significantly increase the level of knowledge regarding AIDS in general (Calder, Brown, & Rae, 1989), as well as AIDS patient care (O'Donnell & O'Donnell, 1987; O'Donnell et al., 1987). Furthermore, education course attendance has been found to be associated with low perceived stress in nurses who care for PWAs (Sherr & George, 1988). Education can help to alleviate discomfort with deviant lifestyles (Bolle, 1988; Flaskerud, 1987; Holland & Tross, 1985; Knox & Dow, 1989; Nichols, 1987). Nurses most often comment that they lack the counselling skills to cope gracefully with situations involving patients and their families, transmission factors, and testing (Flaskerud, 1987; Nichols, 1987; Sherr & McCreaner, 1989).

Experience and personal interaction with PWAs can decrease fear of contagion and negative attitudes towards PWAs (Blumenfield et al., 1987; Holland & Tross, 1985). In order for personal interaction to decrease the stress associated with working with PWAs, it is important that an increase in contact time involve interactive time, not merely technical time (O'Donnell et al., 1987).

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Ultimately, regardless of their personal attitudes, nurses are morally obligated by their professional code of ethics to care for PWAs (Moriarty, 1988; Reisman, 1988). This obligation requires nurses 1) to recognize and resolve personal issues surrounding AIDS care, 2) to acquire the necessary skills to deliver adequate care, 3) to update training as the field develops, 4) to use universal precautions, 5) to be a patient advocate, and 6) to maintain confidentiality (Govoni, 1988; Reisman, 1988).

Burnout

Maslach and Jackson (1986) define burnout with a tripartite theory, composed of emotional exhaustion, depersonalization, and a diminished sense of personal accomplishment. Emotional exhaustion occurs when people feel that they can no longer give of themselves psychologically. Depersonalization occurs when cynical and negative attitudes affect the feelings about one's clients. Personal accomplishment, when diminished, refers to the tendency to evaluate oneself negatively, especially with regards to one's work with clients. Workers with a diminished sense of personal accomplishment feel unhappy with their work and about

themselves. Burnout has also been defined as
adaptation to the progressive loss of idealism, energy,
and purpose (Hare et al., 1988), and as a system of
emotional and physical exhaustion involving the
depersonalization of clients, the development of
negative job attitudes, and of a negative self-concept
(Pot-Mees, 1987; Shendell-Falik, 1985).

Burnout can lead to a deterioration in the quality
of service provided by staff, and can play a role in
low morale, absenteeism, and job turnover (Douglas,
1985; Maslach & Jackson, 1984, 1986). Burnout has been
correlated with physical dysfunction, insomnia,
increased alcohol and drug use, and marital and family
problems (Maslach & Jackson, 1986).

Burnout is common in nursing (Constable & Russell,
1986; Shendell-Falik, 1985; West, 1984). Nursing is a
profession which exposes nurses to many stressful
stimuli which can weaken their state of mental and
physical health (West et al., 1984). There is some
debate as to whether situational factors (i.e.,
occupational role, facility, and shift) and demographic
factors (i.e., age, marital status, and education)
affect burnout. Bush (1988), Salisbury (1988), and
Sherr and George (1988) find these factors to

significantly affect levels of burnout, whereas Hare,
Pratt, and Andrews (1988) state that these factors are
relatively unimportant.

It has been suggested that repeated exposure to
death wears down a nurse's resiliency and contributes
to burnout (Bolle, 1988; Douglas, 1985; Pot-Mees,
1987), yet Hare, Pratt, and Andrews (1988) found that
the amount of exposure to patients with a poor
prognosis of survival was not associated with burnout,
in confirmation of Yasko (1983). Nurses who do burnout
tend to leave the profession altogether, whereas those
nurses who do not burnout seem to develop mechanisms
with which to cope and eventually accommodate the
various stresses to which they are exposed (Douglas,
1985). These are the 'career' nurses for whom the
stresses associated with their jobs would actually
decrease over time due to their increasing experience
and competence.

Although supporting evidence is lacking, it is
generally suggested that the broad range of social and
medical issues to which AIDS nurses are exposed combine
to predispose them to burnout (Bolle, 1988; Bush, 1988;
Constable & Russell, 1986; Flaskerud, 1987; Govoni,

1988; Kelly, 1988; Kelly et al., 1988; McNally, 1988;
Shendell-Falik, 1985).

The evidence of a relationship between social
support and burnout has been inconsistent (Cronin-
Stubbs & Brophy, 1985). Nevertheless, the perception
of social support has been found to be generally
indicative of good health and is seen to buffer against
stress (House, 1980; Orth-Gomer & Unden, 1987; Sarason,
1987). This perception has led to the suggestion that
the enhancement of social support could be a way to
alleviate burnout (Constable & Russell, 1986).

Social Support

It appears that the concept of social support is
intuitively appealing, but that it is also difficult to
operationally define. Orth-Gomer and Unden (1987) use
the frequency of social contacts, the amount of social
activities, and the number of available persons to
define social support. Hutchinson (1987) uses the word
"cultivating" to describe social support. The
definition of "cultivating" includes such aspects of
support as offering help, bringing people together,
supporting each other, listening, expressing interest,
educating, and socializing. Overall, quality of

contact is emphasized over quantity in Hutchinson's
(1987) conceptualization of social support.

Sarason, Shearin, Pierce, and Sarason (1987)
assessed seven measures of social support and found the
measures to examine how much an individual is accepted,
loved, and involved in relationships involving open
communication.

Tardy (1985) conceptualizes social support on five
different levels: directionality, disposition,
description (versus evaluation), content (House, 1980),
and network. Kaufman and Beehr (1986) break down the
composition of social support according to whether it
is tangible (i.e., from a prescribed source),
emotional, or instrumental (i.e., 'tangible' without
coming from a prescribed source). The sources of
support used in this study were supervisors, co-
workers, and people who were extra-organizational.

House (1980) focusses on the content level of
social support in which support is defined as
emotional, instrumental, informational, or appraisal-
oriented. Emotional support is comprised of empathy,
caring, love, and trust. This is seen to be the most
important form of social support. Instrumental support
involves instrumental behaviours that directly help the

person in need. Informational support involves the provision of information that allows people to help themselves. Appraisal support refers to the provision of information pertaining to social comparison that is used to self-evaluate.

Social support is generally believed to be beneficial to mental and physical health. This belief pervades the social support literature despite its being based on correlational results which are often equivocal (Cohen & Wills, 1985; Pearson, 1986; Sarason et al., 1987). Social suport has been reported to be detreimental to mental health and well-being (Kaufman & Beehr, 1986). It can promote dissatisfaction with one's situation without providing a way in which either to improve the situation or to better cope with it. Such inconsistent results are viewed to be a result of the difficult interplay between psychological factors and social support (Orth-Gomer & Unden, 1987), yet there appears to be an overall reluctance within the literature to stop trying to conceptualize and measure social support.

Social support is currently defined as having two means by which it functions: as a main effect, and as a buffer (Cohen & Wills, 1985; House, 1980; Pearson,

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1986; Sarason et al., 1987). Social support operates as a main effect when it is beneficial whether or not the individual is experiencing stress. Social support is found to have this kind of effect when large social support networks provide positive experiences that are regular and stable. It aids in the avoidance of otherwise stressful situations and is equivalent to social interaction, social integration, relational reward, and status support (Cohen & Wills, 1985; Sarason et al., 1987). Support that acts as a main effect is generally associated with good health insofar as it is not affected by an increase in stress (House, 1980; Sarason et al., 1987).

According to the buffering effect model, social support acts to modify the relationship between objective conditions and perceived stress, but it is not felt to have any beneficial effects on health among persons with low amounts of stress. Rather, social support has increasingly beneficial effects on health as stress increases (Cohen & Wills, 1985; Constable & Russell, 1986; Cronin-Stubbs & Brophy, 1985; House, 1980; Pearson, 1986). Social support buffers the effects of stressful events and strengthens coping abilities because it provides one with a wider range of

available services, increasing the repertoire of coping responses. Social support also allows one to realistically appraise one's situation. This reappraisal inhibits maladjustive responses and allows for more adaptive counter responses (Cohen & Wills, 1985; Pearson, 1986). Although it is important for well-being, belonging to social groups does not necessarily mean that one will be buffered against stress, since specific supportive functions may not be provided for. There must be a match between available support and the coping requirements of an individual for buffering to occur (Cohen & Wills, 1985; Sarason et al., 1987).

Social resources that buffer against stress are esteem support, informational support, social companionship, and instrumental support (Cohen & Wills, 1985). Social support can come from friends, family, neighbors, and co-workers (Pearson, 1986). It is known that close friendships and marriages buffer, suggesting that these relationships provide a wide range of social support functions (Cohen & Wills, 1985). Spousal support has been found to be important when looking at the effects of stress on psychological symptoms, whereas work supervisor support has been found to be

associated with physical symptoms (Cohen & Wills, 1985).

Social support in the workplace

Which source of support is important varies across individuals. Wherever the support comes from, it appears that a single source of support is all that is necessary to buffer the effects of stress (House, 1980; Sarason et al., 1987). Social support in the workplace tends to insulate people from the effects of job stress, and it is correlated with job satisfaction and self-esteem (House, 1980). Work supervisors have long been recognized as having an important role with regards to the productivity and morale of workers, and support from supervisors has been found to reduce many of the manifestations of occupational stress (House, 1980). A good supervisor will provide all four types of content-related support (emotional, instrumental, informational, appraisal), while relationships among co-workers vary according to the organizational structure (House, 1980). Lack of supervisor social support has been found to be positively correlated with the emotional exhaustion associated with burnout (Constable & Russell, 1986).

Equivocal evidence has been reported for the importance of co-worker social support in the perception of stress. In accordance with the buffering hypothesis, a low level of co-worker social support has been observed to be correlated with an increase in somatic complaints which increased directly in relation to the amount of perceived stress. However, if a high level of support was perceived, there was no observed relationship between somatic complaints and the perceived level of stress (Pinneau, 1976, cited in House, 1980). It is also possible that communications between co-workers may either convince stressed peers that things are better that they first appear, or they may confirm that things are as bad, if not worse, than they appear (Kaufman & Beehr, 1986). In such situations, the social support provided by peers would actually detract from their ability to cope with their work. Family (Hare et al., 1988; Sarason et al., 1987), and especially spouse (House, 1980) support have been reported to be important in buffering work-related stress with regards to both general affective and psychological states.

Although Hare, Pratt, and Andrews (1988) assert that interventions to reduce burnout should focus on

the organizational issues of supervisor and peer support, results have been equivocal regarding the role of social support in the workplace for nurses. Georgopoulas and Matejko (1967) state that nurses are most strongly affected by the stress from their relationships with other nurses, but Constable and Russell (1986) were unable to replicate this result in their own study. Burnout rates are reported to be much lower for those involved in social support groups at work (McNally, 1988; Shendell-Falik, 1985). Powel (1989) reports that nurses do not perceive their peers as supportive of each other, whereas, Hutchinson (1987) found that there were nurses who had peer support networks, and that those who did had more self-esteem and were more secure than nurses who did not. Cronin-Stubbs & Brophy (1985) have found supervisor and staff support to be strongly negatively associated with burnout. Nurses who care for PWAs are popularly believed to benefit from support groups (Bolle, 1988; Holland & Tross, 1985; Scheitinger, 1986; Sherr, 1987) although there is little objective evidence supporting this assertion.

House (1980) concludes that all people can benefit from social support in combating occupational stresses,

depending on the stress associated with their occupations and depending on the individual's perception of stress.

Age and experience

The ability to cope with the challenges presented to nurses who care for PWAs may be viewed as partially a function of age, experience as a Registered Nurse (RN), and experience working with PWAs. Age has been reported to be a small but significant predictor of burnout in some studies (Bush, 1988; Hare et al., 1988), and not in others (Chiriboga et al., 1983). In one study of palliative care nurses, when asked which qualities are most important in a palliative care nurse, 80% cited general nursing skills and experience as the most important qualities. Maturity (emotional/philosophy of life) was cited as the second most important quality by 60% of the respondents (Gotay et al., 1985). Cronin-Stubbs and Brophy (1985) found that the more experience nurses had in providing direct care to patients, the less burnt out these nurses felt. Finally, an increase in the amount of time spent working with PWAs has been linked anecdotally with an increase in personal satisfaction (Brennan, 1988; Sherr

and experimentally with a corresponding decrease in AIDS-associated stress and discomfort (O'Donnell, & O'Donnell, 1987).

The Current Study

The current study investigates the relationship between social support and burnout in nurses who care for PWAs as compared with nurses who care for non-AIDS patients.

The following hypotheses are tested in the present study:

1. It is hypothesized that burnout will be related to social support for both groups of nurses, and that this effect will be stronger for AIDS-high nurses.

2. It is expected that work-related social support (i.e., from supervisors and co-workers) will be more strongly associated with burnout than will non-work sources of social support (i.e., from friends/relatives and partners).

3. Youth, lack of experience as an RN, and lack of experience with PWA's are expected to be related to be related to burnout.

CHAPTER II

Method

Subjects

Subjects were RNs from St. Paul's Hospital, a teaching hospital in Vancouver, Canada. St. Paul's Hospital adopts the policy of integrating PWAs with the rest of the patient population in an effort to reduce the stigmatization associated with PWAs. It has approximately 570 beds, and a nursing staff of approximately 1000. The experimental group consisted of 34 RNs who are involved in the daily care of PWAs on medical wards (AIDS-high). The control group consisted of 40 RNs on surgical wards who are involved in the care of patients recovering from surgery and who consequently have less frequent contact with AIDS patients (AIDS-low).

Procedure

Subjects were solicited during ward in-service meetings arranged for the purpose of recruitment. Subjects were not obligated to take part in the study, and the names of those who did take part were known only to the principal investigator. Questionnaires were distributed at ward in-service meetings to be

completed on the nurses' own time and were returned in sealed envelopes via the head nurse or the instructor for their wards. Subjects were presented with the option of remaining anonymous, or being linked to their data by numeric code for follow-up research. Subjects were promised a report of the findings of the study.

Questionnaires were distributed to 150 RNs, and 80 were returned. The data from six people were not included in the analysis because the questionnaires were returned with information missing. The response rate of 53% is lower than those reported in similar studies and is interpreted to be a result of the temporary interruption of data collection by a six-week long industrial action initiated by the provincial nurses union.

Measures

1. Maslach Burnout Inventory (MBI; Maslach & Jackson, 1986).

The MBI was used to measure burnout as the dependent variable. The MBI includes three subscales: Emotional Exhaustion, Depersonalization, and Personal Accomplishment. Statements regarding one's attitudes towards work were rated by the subject on a seven-point

Likert scale that addressed how often one experienced

these attitudes and feelings. The Emotional Exhaustion

subscale consists of 9 items (range: 0-54; average

score for nurses: 19-26) that describe feelings of

being exhausted by one's work and of being overextended

emotionally. The Depersonalization subscale consists

of 5 items (range: 0-30; average score for nurses: 6-9)

that describe an impersonal and unfeeling response

towards the people one serves. High scores on these

scales correspond to higher levels of experienced

burnout. The Personal Accomplishment subscale consists

of 8 items (range: 0-48; average score for nurses: 34-

39) that describe one's feelings of successful

achievement and feelings of competence. In this

subscale, lower scores correspond to higher degrees of

experienced burnout. Personal Accomplishment is not

assumed to be opposite of Emotional Exhaustion or

Depersonalization, and the correlations between it and

the other two subscales are low. The scores for each

subscale are considered separately and are not combined

into a single total score. Consequently, each subject

is scored on these three dimensions on the MBI. Scores

are considered low if they are in the lower third of

the normative distribution, average it they are in the middle third, and high if they are in the upper third.

Internal consistency is estimated by Cronbach's alpha (Maslach & Jackson, 1986). The reliability coefficients for the subscales are: Emotional Exhaustion, 0.90, Depersonalization, 0.79 , and Personal Accomplishment, 0.71. The standard error of measurement for each subscale is reported as follows: 3.80 for Emotional Exhaustion, 3.16 for Depersonalization, and 3.73 for Personal Accomplishment. Convergent validity has been established in three ways. First, an individual's MBI scores were correlated with scores on behavioural ratings made by someone close to the individual. Second, MBI scores were correlated with job characteristics implicated in causing burnout. Third, MBI scores were correlated with various measures which have been hypothesized to be related to burnout. All sets of correlations provided significant and substantial evidence for the validity of the MBI (Maslach, & Jackson, 1981). Discriminant validity was established by comparing scores on the MBI with a measure of general job satisfaction. Job satisfaction was moderately negatively correlated with Emotional

Exhaustion and Depersonalization, as well as slightly positively correlated with Personal Accomplishment. Across several samples relatively low correlations between the burnout subscales and other measures of job satisfaction have been reported. It is thus concluded that burnout in not simply a synonym for job dissatisfaction (Maslach & Jackson, 1986).

The possibility of the MBI being reactive to social desirability has also been raised given that the MBI items describe feelings which are contrary to professional ideals. In a study of 40 graduate students of social welfare the scores on the MBI and the Crowne-Marlowe (1964) Social Desirability (SD) Scale were compared. None of the MBI subscale were significantly correlated with the SD at the .05 level (Maslach & Jackson, 1986).

2. House and Wells Measure of Social Support (House, 1980).

The social support measure which was used was developed by House and Wells (House, 1980). Work-related social support is measured on four dimensions in this scale: friend/relative support (2 items, range 0-6, alpha = .83), spouse or partner support (2 items, range 0-7, alpha = .92), co-worker support (3 items,

range 0-9, alpha = .75), and supervisor support (6
items, range 0-18, alpha = .88). The total score for
overall support is obtained by summing together the
scores on the subscales. All items were scored from 0-
3 according to how supportive the source in question is
perceived to be. Normative data is unavailable. The
scale scores are typically correlated with other scales
in order to assess now closely linked social support is
with other constructs (Constable & Russell, 1986;
House, 1980). Those people who identified themselves
as being part of a spousal or common-law relationship
were given one additional point on the spouse or
partner support scale since analyses indicate that
unmarried persons were generally comparable to, or
worse off than, married persons who reported the lowest
level of social support from their spouse (House,
1980).

3. Experience

Experience, as defined by age, the number of years
worked as an RN, and the number of years worked with
PWAs, is included to account for differences between
nurses according to their life experience and the
experience that they have acquired over time on the
job.

Statistical analysis

The impact of the industrial action which occurred
during data collection was assessed by comparing the
Mahalanobis distance (Dixon, 1983) of each
questionnaire that had been completed post-strike, with
those questionnaires completed prior to the strike. A
regression analysis was used to assess the extent to
which experience and social support predicted levels of
burnout across groups.

CHAPTER III

Results

A labour dispute and strike occurred during the period of data collection which made it necessary to determine if the time of completion of the measures affected the scores. Accordingly, the initial analysis of the data involved assessment of the impact of the strike on the nurses' attitudes with respect to the burnout and social support variables. Of the 78 completed questionnaires which were returned, 8 were dated as having been completed post-strike, 4 each from the group of medical nurses and the group of surgical nurses. For each group, the questionnaires completed post-strike were compared with those completed pre-strike, with reference to the Mahalanobis distance of each post-strike subject from the pre-strike group centroid. No significant pre-strike/post-strike differences were observed in either group and all of the data were used in the subsequent analyses.

Univariate analysis

The means and standard deviations are reported in Table 1. Between group pairwise t-tests were performed

Table 1

Summary table of burnout

and social support in nurses.

		Medical (N=34)	Surgical (N=40)
Emotional	Mean:	24.06	24.20*
Exhaustion	SD:	10.01	10.60
Depersonal-	Mean:	8.12	7.82
ization	SD:	6.27	5.05
Personal	Mean:	36.53	36.65
Accomplishment	SD:	6.43	6.08
Supervisor	Mean:	14.06	11.06
Support	SD:	3.11	4.91
Co-worker	Mean:	7.12	7.60
Support	SD:	1.59	1.35
Friend/Relative	Mean:	3.91	3.85
Support	SD:	1.54	1.99
Partner	Mean:	2.94	4.27
Support	SD:	2.97	2.90
Age	Mean:	32.59	34.45
	SD:	9.54	8.84
Years Worked	Mean:	8.97	10.22
As As RN	SD:	10.53	9.21
Years Worked	Mean:	2.76	2.60
With PWA's	SD:	1.97	2.12

*All between group pairwaise comparisons of variables
were insignificant at the 5% level.

and no significant differences were observed on any individual variable with reference to the means and standard deviations between groups. The burnout levels were within the average range of the norms for medical personnel (Maslach & Jackson, 1986). Norms for the House and Wells (1980) measure of social support were unavailable for the purposes of comparison. The range of ages, years of experience as an RN, and years worked with PWAs are typical of the literature (Bush, 1988; Hare et al., 1988; Sherr & McCreaner, 1989).

Multivariate analysis

The correlation matrix for burnout (emotional exhaustion, depersonalization, and personal accomplishment), social support (supervisor, co-worker, friend/relative, and partner), and experience (age, years worked as an RN, and years worked with PWAs) in AIDS-high nurses is presented in Table 2, and for AIDS-low nurses in Table 3. The correlations are presented as background information for the interpretation of the regression analysis and are not the focus of this data analysis. The levels of significance are reported for the conveniance of the

Table 2

Correlation matrix for burnout, social support,

and experience in AIDS-high nurses (N=34).

	Emotional Exhaustion	Depersonal -ization	Personal Accomplish -ment	Supervisor Support	Co-worker Support	Friend /Relative Support	Partner Support	Age	Years Worked As An RN	Years Worked With PWAs
Burnout: Emotional Exhaustion	1.00	...	...	...	...	...	...	...	...	...
Depersonal -ization	.73**	1.00	...	...	...	...	...	...	...	...
Personal Accomplishment	-.31	-.36*	1.00	...	...	...	...	...	...	...
Social Support: Supervisor Support	-.29	-.07	-.07	1.00	...	...	...	...	...	...
Co-Worker Support	.00	.08	-.10	.27	1.00	...	...	...	...	...
Friend/Relative Support	-.06	-.02	-.09	-.21	.36*	1.00	...	...	...	...
Partner Support	.09	-.06	.03	-.11	-.23	-.13	1.00	...	...	...
Experience: Age	-.17	-.36*	-.07	.04	.02	.16	-.12	1.00	...	...
Years Worked As An RN	-.07	-.24	-.13	-.05	-.09	.10	.00	.87**	1.00	...
Years Worked With PWAs	.05	-.12	-.18	-.17	-.10	-.04	.03	.69**	.78**	1.00

* p<.05
**p<.001

Table 3

Correlation matrix for burnout, social support,

and experience in AIDS-low nurses (N=40).

	Emotional Exhaustion	Depersonal -ization	Personal Accomplish -ment	Supervisor Support	Co-worker Support	Friend /Relative Support	Partner Support	Age	Years Worked As An RN	Years Worked With PWAs
Burnout:										
Emotional Exhaustion	1.00	...	...	...	...	...	...	...	...	...
Depersonal -ization	.44**	1.00	...	...	...	...	...	...	...	...
Personal Accomplishment	-.19	-.47**	1.00	...	...	...	...	...	...	...
Social Support:										
Supervisor Support	-.04	-.25	.36*	1.00	...	...	...	...	...	...
Co-Worker Support	-.16	-.27	.27	.34*	1.00	...	...	...	...	...
Friend/Relative Support	.16	-.08	.10	.29	.12	1.00	...	...	...	...
Partner Support	.12	-.24	.33*	.20	.06	.33*	1.00	...	...	...
Experience:										
Age	-.45**	-.46**	.30	-.06	.07	-.32*	.12	1.00	...	...
Years Worked As An RN	-.49***	-.40*	.28	-.04	-.01	-.21	.12	.89***	1.00	...
Years Worked With PWAs	-.25	-.19	.22	.13	.11	.02	-.05	.57***	.59***	1.00

*   p<.05
** p<.01
*** p<.001

reader and were determined without controlling for family-wise error rate.

A multiple regression analysis (Table 4) was conducted first by entering only the social support variables, next by entering only the experience variables, and finally by entering all of the social support and experience variables together. This procedure was used for both the AIDS-high and the AIDS-low nurses. Significance was determined by assessing the effects of the introduction of each set of variables. The adjusted square multiple correlation (adj. R^2) measured the ability of each set of variables to predict each of the components of burnout. The adj. R^2 is a measure of the amount of variance in the criterion burnout variables (emotional exhaustion, depersonalization, and personal accomplishment) which is accounted for by the predictor variables (social support, experience, & social support combined with experience).

The social support variables were first assessed as a set of variables to determine the overall effect of social support on each of the burnout variables across groups. Contrary to expectations, social support did not account for a significant amount of the

Table 4

Regression analysis of burnout

as predicted by experience and social support.

	Adjusted Square Multiple Correlations (R^2)		
	Social Support[a]	Experience[b]	Experience & Social Support
Emotional Exhaustion:			
AIDS-High[c] Nurses	.00	.00	.00
AIDS-Low[d] Nurses	.00	.18*	.17
Depersonal -ization:			
AIDS-High Nurses	.00	.09	.00
AIDS-Low Nurses	.04	.16*	.23
Personal Accomplishment:			
AIDS-High Nurses	.00	.00	.00
AIDS-low Nurses	.13	.02	.15

*$p < .05$
[a]Social support includes supervisor, co-worker, friend/relative, and partner support.
[b]Experience includes age, years worked as an RN, and years worked with PWAs.
[c]N=34
[d]N=40

variance in any of the burnout variables for either
group of nurses. Because social support overall was
not predictive of burnout, the data did not support the
more detailed analysis required to assess the
relationship between the work and non-work components
of social support and burnout.

It was expected that youth, lack of
experience as an RN, and lack of experience with PWA's
would be predictive of burnout in both groups of
nurses. The introduction of these experience variables
into the regression equation did not account for a
significant amount of the variance in any of the
burnout variables in the AIDS-high nurses. However,
the set of experience variables did account for a
significant amount of the variance in the AIDS-low
nurses in predicting the emotional exhaustion (adj. $R^2 =$
.18; $F(3,32)=3.435$; p<.05) and the depersonalization
(adj. $R^2 = $ .16; $F(3,32)=3.016$; p<.05) components of
burnout.

The social support and experience sets of
variables were combined to determine whether there was
any interaction effect between them in the prediction
of burnout. The amount of variance accounted for by

these predictor variables did not significantly

increase with the use of this procedure.

CHAPTER IV

DISCUSSION

Social support and burnout

The hypothesis that burnout would be associated with social support, particularly for nurses who care for PWAs, was not supported in this study. The results observed in this study are not in accord with the general trend within the literature. Most authors suggest that working with PWAs entails stress above and beyond that which is inherent in other areas of nursing and that nurses who care for PWAs are expected to be at a greater risk of burnout, and in greater need of social support, relative to other areas of nursing (Douglas, 1985; Lebourdais, 1989; Pot-Mees, 1987). However, most of the articles written about the impact of the stresses involved in caring for PWAs have been rhetorical rather than experimental. The empirical results of this study indicate that nurses for PWAs are no more burnt out than are nurses of non-AIDS patients. The mean burnout levels of both groups of nurses in this study are within the average range for nurses in general (Maslach & Jackson, 1986). The pattern and size of the correlations within each group among the

burnout variables is also consistent with norms (Maslach & Jackson, 1986), nor does it appear that there are any differences between these two groups of nurses the way in which they use social supports. The two groups of nurses do not differ significantly in their group means on any of the social support subscales, and the sizes of the correlations within each group are consistent with those reported by House (1980).

Possible explanations for this departure from literature on the effects of caring for PWAs include the high level of AIDS education available in the setting that was sampled, the use of integrated wards at the hospital, self-selection bias on the part of the volunteer subjects, the inappropriateness of the social support measure which was used, and the occurrence of strike action during the study.

As of May 30, 1989, the rate of incidence of AIDS in British Columbia was 171 cases per million, the highest in the country (Goldstone, 1989). Ninety percent of all reported cases live in Vancouver proper (Reckart, 1989). As Vancouver's main inner-city hospital, St. Paul's has had to develop expertise in AIDS care in order to meet the needs of this community,

and staff receive the most up-to-date information available regarding the risks involved in AIDS care. Formally, staff are required to attend one inservice meeting regarding universal precautions in general, and one inservice meeting specifically on AIDS. Specialists, general practitioners, and head nurses attend a weekly AIDS Care Committee meeting regarding AIDS patients and current issues relevant to AIDS care. Head nurses pass on updated information to their staff. Much information is acquired informally from the more experienced nurses on the ward, and if a special issue evolves which cannot be addressed informally, an inservice meeting is arranged to formally address the issue (R.Riddell, Nursing Director -- St. Paul's Hospital, personal communication, Sept. 28, 1989).

Education is required to alleviate the discomfort associated with working with PWAs (O'Donnell, & O'Donnell, 1987; O'Donnell et al., 1987; Sherr & George, 1988). It is suggested that the ease of availability of information regarding PWAs at St. Paul's dispels many of the fears which may be held by nurses who care for PWAs in facilities which have more limited access to information.

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The policy of maintaining integrated wards at St. Paul's is another possible explanation for the apparent lack of burnout within nurses in this study. Nurses involved in fulltime AIDS nursing are reported to burn out within 18 mos - 3 years as a function of the intense pressures associated with these nursing areas (Lebourdais, 1989). Organizational factors, such as integrated wards, influence the stresses inherent in caring for PWAs (Pot-Mees, 1987; Salisbury, 1986; Sherr, 1988). It is proposed that the use of integrated wards relieves the pressure on nurses who care for PWAs. None of the nurses at St. Paul's provide care exclusively for AIDS patients and thus they may renew themselves by caring for non-AIDS patients if the burden of caring for PWAs becomes overwhelming.

Subjects participated in the study on a voluntary basis. They were asked to take part by filling out the questionnaires on their own time and they were asked to take responsibility for the return of the questionnaires to their head nurses or instructors. These instructions require initiative on the part of the subject, and presume that subjects are willing to volunteer approximately 1/2 hour of their free time for

a work-related activity. While this format was
considered unavoidable, it is probable that this
partially accounts for the lack of burnout observed in
this study. It is less likely that those nurses who
were burnt out from work would volunteer their free
time to take part in a work-related activity. To
expect burnt out nurses to participate would be to
expect them to be concerned enough about their work to
contribute extra effort, yet the lack of this type of
concern is one of the characteristics which signal the
emotional exhaustion and depersonalization of burnout.
The apparent lack of burnout among nurses may be seen,
in part, as an artifact of the method of data
collection.

Whereas the Maslach Burnout Inventory is a well-
established reliable, and valid instrument, the House
and Wells Measure of Social Support is less
psychometrically sound. It is difficult to say exactly
what it measures, although it has adequate reliability
and high face validity for the study of work-related
social support. As has been stated earlier, there is
much debate as to what is the most appropriate
theoretical definition of social support, let alone
what is the best operational definition. There is a

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wide variety of measures which address general social support, yet there are few which take into account work-related social support. It was the intent of this study to address both work and non-work social support as efficiently as possible, which this measure does. However, without further research documenting the validity of this scale, it is difficult to say exactly what it is measuring. Although the results indicate that there is not a significant relationship between these measures of social support and burnout, definitive statements regarding the relationship between these two concepts can not be made without further study using psychometrically sound instruments.

The lack of a relationship between social support and burnout can also be understood in light of the state of industrial relations at the time of the study. Nurses who participated in this study were in the midst of negotiating their contract when they were approached to participate in the study. The contract negotiations, including a two-week long strike, continued throughout data collection. The investigator felt a certain sense of irony in giving a burnout questionnaire to nurses who were voting on whether or not to strike. There was concern that the evident

dissatisfaction that the nurses were voicing regarding their work situation might be reflected in a ceiling effect on the burnout questionnaire. Upon analysis of the data, it became clear that the opposite effect had occurred. Instead of feeling highly burnt out, as might be expected of striking nurses, they reported only sub-clinical 'average' levels of burnout typical of their profession.

Burnout is a syndrome which is typified by a lack of ability to care about one's work situation. Those nurses who were voicing dissatisfaction cared a great deal about improving their work situation, and they did not evidence the apathy which would have suggested that they were experiencing burnout. Furthermore, the ground-swell of support among provincial nurses during this industrial action created a sense of solidarity which, in and of itself, may have provided a global sense of support which could not be tapped by the type of questions in the social support questionnaire used.

Work-related social support

It was predicted that social support from supervisors and co-workers would be more strongly associated with burnout than would non-work sources of

social support. Overall, social support was not significantly predictive of burnout, consequently a more specific regression analysis of the relationship between these two aspects of social support and burnout was considered inappropriate.

Effect of age and experience

It was predicted that lack of experience, including youth, lack of experience as an RN, and lack of experience working with PWA's would be associated with burnout. This relationship was confirmed, in this study, among the AIDS-low nurses, but not among the AIDS-high nurses. The differences between groups are attributable not to the differences in their ages, experience as RNs, or experience with PWAs, but rather to the type of nursing required of these two groups.

Neither group of nurses differed significantly in age or in the number of years worked as RNs. The average age of the AIDS-high nurses was 33, and the average age of the AIDS-low nurses was 34, but the distribution of their ages was heavily skewed for both groups. Fifty-five percent of the AIDS-high nurses and forty-three percent of the AIDS-low nurses responding to this study fell between the ages of 20 and 30. The

average number of years worked as RNs was 9 years for AIDS-high nurses and 10 years for AIDS-low nurses.

Both of the nursing groups had worked with PWAs for an average of about 2 1/2 years but this is not seen to be directly indicative of the amount of experience each group has had with PWAs. AIDS patients are regularly admitted to the medical wards on which AIDS-high nurses work. PWAs are admitted less frequently, for shorter durations onto the surgical wards on which AIDS-low nurses work. Despite AIDS-low nurses having been exposed to PWAs over the same length of time, the amount of their exposure is much less than that of AIDS-high nurses. Consequently, the number of years worked with PWAs is considered to have contributed little to clarify the effect of the amount of exposure to PWAs on nurses' attitudes.

An attempt was made to determine how many AIDS patients had been seen by each nurse. Medical nurses were unable to report this because large numbers of AIDS patients have seen over the years and it is difficult to estimate the number of people this involved as AIDS patients are often readmitted into hospital repeatedly. Furthermore, the number of years worked with PWAs did not correlate with any of the

social support variables, nor with the burnout
variables. Age, the number of years worked as an RN,
and the number of years worked with PWAs, were combined
into a composite of age and experience in an effort to
assess the effects of general life experience on the
attitudes of nurses regarding social support and
burnout. The number of years worked with PWAs was
incorporated into the regression analysis because it
was nominally the only variable that took PWAs into
account explicitly, although it was not expected to,
and in fact did not contribute significantly to the
regression equation.

One of the central elements of burnout is the
passage of time during which a work situation
progresses from bad to worse. At first glance, this
hypothesis seems to contradict the theory on which
burnout is based. According to the theory, the more
time passes (i.e., the older one gets, the more
experience one has at one's job), the more burnt out
one would expect to be. But this theory does not take
into account the trend in nursing, echoed in this
study, for nurses to leave the profession before they
acquire substantial experience. Less than 1/3 of the
AIDS-high nurses and less than 1/2 of the AIDS-low

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nurses in this study had been RNs for 10 years or more. The minority of nurses who are able to avoid burning out are those who remain in the profession throughout their career.

When these facets of nursing are considered, it becomes reasonable to anticipate that there would be a negative relationship between experience and burnout. Among AIDS-high nurses no relationship was observed between burnout and experience, but among AIDS-low nurses, in accord with expectations, youth, and lack of experience (as an RN and with PWAs) were predictive of the emotional exhaustion and depersonalization components of burnout. Contrary to predictions, these experience variables were not significantly associated with the third burnout component, personal accomplishment, for AIDS-low nurses.

The differences observed between these two groups of nurses are understood to be a function of the differences of their work environments. AIDS-high nurses work on medical wards while AIDS-low nurses work on surgical wards. Surgical nurses were chosen as the appropriate control for the comparison of attitudes towards burnout and social support because of the need to hold organizational variables constant, although it

is generally accepted that within St. Paul's Hospital,
surgical nursing is substantially different from
medical nursing (I. Goldstone, Nursing Director -- St.
Paul's Hospital, personal communication, Aug. 31, 1989;
R. Riddell, Nursing Director, Sept. 07, 1989).

AIDS-high (medical) nursing involves complex care
over sometimes lengthy periods of time, with fewer
'cures' achieved than are achieved on surgical wards.
On medical wards, patients are often treated for
several ailments at any given time, and patients are
often readmitted for repeated treatments for these more
chronic ailments.

AIDS-low (surgical) nurses are responsible for
caring pre- and post-operatively for patients who have
discrete physical problems that are dealt with via
surgery, patients who are often up and walking the same
day that surgery is performed. There is often a
definable beginning and end to the physical problems
which these patients have.

Antonovsky's Sense of Coherence (SOC) theory
(Antonovsky, 1987) provides a possible explanation for
these results. AIDS-high nursing, and medical nursing
in general, is unpredictable and requires nurses to
respond to continually shifting conditions in their

patients on a daily basis. In contrast, AIDS-low
(surgical) nursing is predictable, and it is possible
to become familiar with the typical progression of
healing associated with any given surgical procedure
(I. Goldstone, personal communication, Aug. 31, 1989;
R. Riddell, personal communication, Sept. 07, 1989).
The SOC theory maintains that the more predictable
stresses are, the easier they are to cope with, and
thus the less stressful they are perceived to be.
AIDS-low (surgical) nursing does become more
predictable as a function of experience, and so over
time, with increasing age and experience, AIDS-low
nurses are faced with fewer novel situations.
According to the model then, AIDS-low nurses should
experience less emotional exhaustion and
depersonalization over time. Their sense of personal
accomplishment was not associated with experience,
which may again be a reflection of the extrinsically
rewarding nature of surgical nursing. AIDS-low nurses
continue to see people 'cured' over the course of their
careers, and their satisfaction with this does not seem
to diminish or increase over time. More focussed study
on how and why nurses consider their jobs to be
rewarding is required.

Summary

1.   Contrary to expectations, social support was not significantly predictive of burnout in either group of nurses. These results are discussed with regards to the use of integrated wards, the high level of AIDS education available at St. Paul's Hospital, self-selection bias on the part of the subjects, possible weakness of the social support measure that was used, and the occurrence of strike action during the study.

2.   The hypothesis that work-related social support would be associated with burnout more strongly than non-work social support could not be tested in this study because of the lack of an overall relationship between social support and burnout.

3.   In AIDS-high nurses, contrary to expectations, no association was observed between experience and burnout. In AIDS-low nurses, less experience was significantly predictive of emotional exhaustion and depersonalization as expected, but experience was not predictive of personal accomplishment.

4.   It is proposed that the differing association between age and experience in the two groups of nurses is a function of the unpredictable nature of AIDS-high

nursing, as opposed to the predictable nature of AIDS-low nursing.

Limitations of Current Study

The current findings must be interpreted in the context of the following limitations:

1. The current study reflects the attitudes of a specific hospital, at a specific time in the progression of knowledge about AIDS. It is a snapshot of current attitudes and may not be generalizable to other hospitals now, or even to the same hospital in a year from now.

2. The current study did not specifically assess the attitudes of nurses towards AIDS patients. Given that the study was undertaken in a hospital which has integrated wards, and that the study asked questions about the nurses' attitudes toward their job in general, not about PWAs specifically, it is not possible to state conclusively the extent to which PWAs do or do not affect nurses' use of social support, nor their levels of burnout.

3. Although the subjects were nurses drawn from the same hospital, the differences between surgical and medical nursing are extensive enough that it might be

argued that they are nonequivalent for the purposes of studying AIDS-care effects.

Conclusions and Implications for Future Research

Contrary to predictions, no relationship between social support and burnout was observed in nurses who care for PWAs. Future studies of nurses of PWAs should explore the coping mechanisms used by these nurses in relation to burnout. It would be informative to identify and compare the attitudes of nurses who care exclusively for PWAs with those who care exclusively for the terminally ill, in order to more directly assess the impact of caring for PWAs on two groups of nurses whose duties are more similar than those of medical and surgical nurses.

Future studies of social support should assess satisfaction with social supports more directly, and should provide a comparison of the levels of perceived social support with established norms. These more specific analyses would aid in clarifying the complex interaction between social support and burnout.

Youth and lack of experience need to continue to be included in future studies of burnout. These variables should be broken down into more specific

components to assess more specifically what it is that makes them significantly predicative of burnout.

This study involved the population of female RNs at St. Paul's. Their involvement is not seen as representative of the experience of their male counterparts. Male nurses at St. Paul's often have personal ties to the gay population of Vancouver. It is expected that the relationship between co-worker and friend/relative support and burnout would be much stronger than was observed in this study because of the overlap of their social circle and their patients. Furthermore, as a function of the increased density of their social support networks, it is expected that their burnout levels would be higher than average.

APPENDIX

Data Set

Variables and column locations:

Col 1: 0 = AIDS-high (surgical) nurse; 1 = AIDS-low
      (medical) nurse
Col 2-3: Identification number
Col 4: Consent to future study: 0 = no; 1 = yes
Col 5-6: Burnout -- Emotional Exhaustion
Col 7-8: Burnout -- Depersonalization
Col 9-10: Burnout -- Personal Accomplishment
Col 11-12: Supervisor support
Col 13: Co-Worker support
Col 14: Friend/Relative support
Col 15: Spouse support
Col 16-17: Age
Col 18-19: Number of years worked as an RN
Col 20: Number of years worked with PWAs

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10102201450884028011
10204218251796042205
10343409301562528012
10406607401496032022
10503219321474527031
10603019321392025043
10701802211895662457
10811804361795028043
10912914431581332123
11012206401062725022
11103817301463028011
11211808320865032093
11301005361555025011
11414219450864528084
11501705371265042194
11601903381766047262
11700705421781023011
11801703281594523012
1190       1094724025
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12401101411474037173
12502204351364628033
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13312109191674736083
13411100471894048011
13503013411796521011
13612308411774023002
13702113281496035055
13802404441652727011
00101008211270032123
00212009351084028012
00310901361896753325
00413308421685734054
00501906351582431040
00603310361496732011
00711202340650051263
00812113230066623010
00902508371694131011
01001316310776023032
01103102401664724020
01212312330482038185
01314317391883625053
01402115420572544233
01503101371284531084
01611508471686025053
01711402440291754303
01803501371064439141
01902503451386740195
02002305441074742185
02102503460876629080
02203009401593625031
02313113291066025033
02404722291194432021
02513716250692128082
02613402421896739188
02711911350650148176
02806519311544724011
02910901411884651304
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03103314321166739153
03211304391393739011
03302505381396724040
03512105391895031081
03602006371895339146
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037133063912920400 65
038031084004633   125
039036123707623270 10
040104094318805371 40
041130064116767402 06
042023063606837330 53
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CHAPTER VI

REFERENCES

Antonovsky, A. (1987). Unveiling the Mystery of
   Health. San Francisco: Jossey-Bass.

Andre, B.C. (1988). AIDS, attitudes, and infection
   control. American Journal of Infection Control,
   16(6), 272-273.

Blumenfield, M., Smith, P.J., Milazzo, J., Seropian,
   S., & Wormser, G.P. (1987). Survey of attitudes of
   nurses working with AIDS patients. General Hospital
   Psychiatry, 9, 58-63.

Bolle, J.L. (1988). Supporting the deliverers of care:
   Strategies to support nurses and prevent burnout.
   Pastoral Psychology, 34(3), 173-192.

Brennan, L. (1988). The battle against AIDS. Nursing,
   April, 60-64.

Bush, J.P. (1988). Job satisfaction, powerlessness,
   and locus of control. Western Journal of Nursing
   Research, 10(6), 718-731.

Butler, L., & Lynch, Y. (1988). Facing up to AIDS.
   Canadian Nurse, 84(9), 20-24.

Calder, B., Brown, Y., & Rae, D. (1989, June). AIDS education for nursing students: Does it make a difference? Paper presented at the 5th International Conference on AIDS, Montreal, Canada.

Chiriboga, D.A., Jenkins, G., & Bailey, J. (1983). Stress and coping among hospice nurses: Test of an analytic model. Nursing Research, 32(5), 294-299.

Cohen, S., & Wills, T.A. (1985). Stress, social support, and the buffering hypothesis. Psychological Bulletin, 98(2), 310-357.

Constable, J.F., & Russell, D.W. (1986). The effect of social support and the work environment upon burnout among nurses. Journal of Human Stress, 12(1), 20-26.

Cronin-Stubbs, D., & Brophy, E.B. (1985). Burnout: Can social support save the psych nurse? Journal of Psychosocial Nursing, 23(7), 8-13.

Crowne, D., & Marlowe, D. (1964). The approval motive. New York: Wiley.

Dilley, J.W., Ochtill, H.N., Perl, M., & Volberding, P.A. (1988). Findings in psychiatric consultations with patients with AIDS. American Journal of Psychiatry, 142(1), 82-86,

Dixon, W.J. (Ed.). (1983). BMDP statistical software.

    Berkeley: Univ. of California Press.

Douglas, S. (1985). Nursing: The most stressful

    specialty? Nursing Mirror, 161, 32-33.

Flaskerud, J.H. (1987). AIDS: Psychosocial aspects.

    Journal of Psychosocial Nursing, 25(12), 9-16.

Friedland, G. (1988). AIDS and compassion. Journal

    of the American Medical Association, 259(19), 2898-

    2899.

Gerbert, B., Maguire, B., Badner, V., Altman, D., &

    Stone, G. (1988). Why fear persists: Health care

    professionals and AIDS. (Review). Journal of the

    American Medical Association, 26-(3), 3481-3483.

Georgopoulas, B. & Matejko, A. (1967). The American

    general hospital as a complex social system. Health

    Sciences Research, 2, 76-112.

Goldstone, I. (1989, June). An interdisciplinary

    approach to AIDS care: St. Paul's Experience.

    Paper presented at the 5th International Conference

    on AIDS, Montreal, Canada.

Gotay, C.C., Crockett, S., & West, C. (1985).

    Palliative home care nursing: Nurses' perceptions

    of roles and stress. Canada's Mental Health, 33(2),

    6-9.

Govoni, L.A. (1988). Psychosocial issues of AIDS in the nursing care of homosexual men and their significant others Nursing Clinics of North America, 23(4), 749-765.

Hare, J., Pratt, C.C., & Andrews, J.G. (1988). Predictors of burnout in professional and paraprofessional nurses working in hospitals and nursing homes. International Journal of Nursing Studies, 25(2), 21-25.

Holland, J.C., & Tross, S. (1985). The psychosocial and neuropsychologic sequelae of the acquired immune deficiency syndrome. Annals of Internal Medicine, 103, 760-764.

House, J.S. (1980). Occupational stress and the mental and physical health of factory workers. Ann Arbor: University of Michigan.

Hutchinson, S. (1987). Self-care and stress. Image, 19(4), 192-196.

Katz, I., Hass, R.G., Parisi, N., Astone, J., McEvaddy, D., & Lucido, D.J. (1987). Lay people's and health care personnels' perceptions of cancer, AIDS, cardiac, and diabetic patients. Psychological Reports, 60, 515-629.

Kaufmann, G.M., & Beehr, T.A. (1986). Interactions

between job stressors and social support: Some

counterintuitive results. Journal of Applied Social

Psychology, 17(3), 231-250.

Kayal, P.M. (1985). "Morals", medicine, and the AIDS

epidemic. Journal of Religion and Health, 24(3),

218-238.

Kelly, J.A. (1988). The AIDS health crisis. Plenum:

New York.

Kelly, J.A., St. Lawrence, J.S., Hood, H.V., Smith, S.,

& Cook, D.J. (1988). Nurses' attitudes towards

AIDS. Journal of Continuing Education in Nursing,

19(2), 78-83.

Knox, M.D., & Dow, M.G. (1989, June). Staff discomfort

in working with HIV spectrum patients. Paper

presented at the 5th International Conference on

AIDS, Montreal, Canada.

Lebourdais, E. (1989). Hopelessness and helplessness:

Treating the doctors who treat AIDS patients.

Canadian Medical Association Journal, 140(4), 440

-442.

Marrie, T., MacIntosh, N., & Streight, R. (1989, June).

   The emotional impact of needlestick injuries on

   health care workers. Poster session presented at

   the 5th International Conference on AIDS, Montreal,

   Canada.

Maslach, C., & Jackson, S.E. (1981). The measurement

   of experienced burnout. Journal of Occupational

   Behavior, 2, 99-113.

Maslach, C., & Jackson, S. (1984). Burnout in

   organizational settings. Applied Social Psychology

   Annals, 5, 133-153.

Maslach, C., & Jackson, S.E. (1986). Maslach Burnout

   Inventory: Manual. Consulting Pyschologists Press:

   Palo Alto, CA.

McLeod, A., Smith, J., & Willoughby, B. (1986).

   Hospice care needs of AIDS patients. Journal of

   Palliative Care, 2(1), 33-34.

McNally, L. & Beck, L.M. (1988). A chronic care

   approach to health and social services for people

   with AIDS. Journal of Palliative Care, 4(4), 96-99.

Moriarty, M.B. (1988). Why AIDS wracks the conscience

   of nursing. RN, 51(10), 58-65.

Nichols, S.E. (1987). Emotional aspects of AIDS --
    Implications for care providers. Journal of
    Substance Abuse Treatment, 4, 137-140.

O'Donnell, L., & O'Donnell, C.R. (1987). Hospital
    workers and AIDS: Effect of in-service education on
    knowledge and perceived risks and stresses. New
    York State Journal of Medicine, 87, 278-280.

O'Donnell, L., O'Donnell, C.R., Pleck, J.H., Snarey,
    J., & Rose, R.M. (1987). Psychosocial responses of
    hospital workers to Acquired Immune Deficiency
    Syndrome (AIDS). Journal of Applied Social
    Psychology, 17(3), 269-285.

Orth-Gomer, K., & Unden, A.L. (1987). The measurement
    of social support in population surveys. Social
    Science and Medicine, 24(1), 83-94.

Pearson, J.E. (1983) The definition and measurement
    of social support. Journal of Counseling and
    Development, 64, 390-395.

Pinneau, S.R., Jr., (1976). Effects of social support
    on psychological and physiological strains.
    Unpublished Ph.D. thesis. Ann Arbor: Univ. of
    Michigan.

Pot-Mees, C. (1987). Beating the burnout. Nursing
    Times, 83(30), 33-35.

Powel, V.C. (1989). Caring for colleagues. <u>Canadian</u>
<u>Nurse</u>, <u>Feb</u>., 14-17.

Reckart, M.L. (1989). AIDS update: Quarterly report --
June 1989. Vancouver, BC: Ministry of Health.

Reinisch, J.M., Sander, S. A., & Ziemba-Davis, M.
(1989, June). <u>The prevalence of AIDS-related sexual</u>
<u>behaviours among white, middle-class, urban American</u>
<u>adults: A survey of research from Kinsey to the</u>
<u>present</u>. Paper presented at the 5th International
Conference on AIDS, Montreal, Canada.

Reisman, E.C. (1988). Ethical issues confronting
nurses. <u>Nursing Clinics of North America</u>, <u>23(4)</u>,
789-802.

Richardson, J.L., Lochner, T., McGuigan, K., & Levine,
A. (1987). Physician attitudes and experience
regarding the care of patients with Acquired Immune
Deficiency Syndrome AIDS and related disorders
(ARC). <u>Medical Care</u>, <u>25(8)</u>, 675-685.

Rosenthal, Y., & Haneiwich, S. (1988). Nursing
management of adults in the hospital. <u>Nursing</u>
<u>Clinics of North America</u>, <u>23(4)</u>, 707-718.

Salisbury, D.M. (1986). AIDS: Psychosocial
implications. <u>Journal of Psychosocial Nursing</u>,
<u>24(12)</u>, 13-16.

Sarason, B.R., Shearin, E.N., Pierce, G.R., & Sarason, I.G. (1987). Interrelations of social support measures: Theoretical and practical implications. Journal of Personality and Social Psychology, 52(4), 813-832.

Scheitinger, H. (1986). Hospice needs of the person with AIDS. Journal of Palliative Care, 2(1), 31-32.

Scheitinger, H. McCarthy, P., Gillen, M., & Hammrich, H. (1988). A strategy for educating health care providers about AIDS: The California Nurses Association's AIDS Train the Trainer program. Nursing Clinics of North America, 23(4), 779-787.

Shendell-Falik, N. (1985). Fighting burnout among nurse managers. Nursing Success Today, 2(10), 7-15.

Sherr, L. (1987). The impact of AIDS in obstetrics on obstretric staff. Journal of Reproductive and Infant Psychology, 5, 87-96.

Sherr, L., & George, H. (1988). Effects of HIV and AIDS work on staff involved in caring. Paper presented to the Health Psychology Conference, British Psychological Society, September 1988.

Sherr, L. & McCreaner, A. (1989). Summary evaluation

of the National AIDS Counselling Training Unit in

the U.K.. Counselling Psychology Quarterly, 2(1),

21-32.

Tardy, C.H. (1985). Social support measurement.

American Journal of Community Psychology, 13(2),

187-202.

Treiber, F.A., Shaw, D., & Malcolm, R. (1987). AIDS:

Psychological impact on health personnel. The

Journal of Nervous and Mental Diseases, 175(8), 496

-499.

West, D.J., Horan, J.J., & Games, P.A. (1984).

Component analysis of occupational stress

inoculation applied to registered nurses in an acute

care hospital setting. Journal of Counseling

Psychology, 31(2), 209-218.

Yasko, J. (1983). Variables which predict burnout

experienced by oncology clinical nurse specialists.

Cancer Nursing, 6, 109-116.