

Full Length Research

Selected Models To Analyse The Demographic And Management Factors As Correlates Of Occupational Hazards Among Health Workers In Specialist Hospitals, Port Harcourt, Rivers State.

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This study analyzed some selected models in the demographic and management factors as correlates of occupational hazards among health workers in specialist hospitals, Port Harcourt in Rivers state. Nigeria. A descriptive survey research design was used. The selected model used in the analysis was Health Belief Model, Cultural Theory and Risk, Trans theoretical Model of Behavior Change. A validated 45-item instrument titled Correlates of Occupational Hazards among Health Workers in Specialist Hospitals (COHHWSH) was used for data collection focusing on Perceived severity of health model, Perceived Susceptibility of Health Belief Model, Perceived Benefits of Health Model, Perceived barriers of Health Belief Model, Modifying Variables of Health Belief Model Cues to Action of Health Belief Model, and also covered are the Stages of behavior Change. Findings established that infrastructure and staff attitude are positive significant predictors of occupational hazards, remuneration, personnel, working environment and management style were not significant predictors of occupational hazards among health workers; Age and working experience do not significantly influence occupational hazards among staff. It was therefore recommended that level of infrastructure in hospitals should be improved for the efficient delivery of duties of health workers and health workers should try to develop positive attitude towards duties because a positive attitude to work is likely to lead to reduced occupational hazard among others.

Key Words: Demographic, Management, Correlates, Occupational Hazards, Health Workers, Specialist Hospitals, Wellbeing, Therapeutic, Typology

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INTRODUCTION

Worldwide, the healthcare personnel represent large working populations. Healthcare personnel work in a domain that is thought to be a standout amongst the most dangerous work-related settings (Manyele, Ngonyani, & Eliakimu, 2008). Notwithstanding the typical work

environment related exposures, healthcare personnel experience different risks because of their occupational work related activities (Goniewicz, Włoszczak-Szubzda, Niemcewicz, Witt, Marciniak-Niemcewicz & Jarosz, 2012).

Customarily, safety measures are set of measures detailed to anticipate transmission of blood borne pathogens while giving medicinal services. Since distinguishing proof of patients tainted with these pathogens cannot be dependably made by restorative history and physical examination, (CDC) has suggested that standard wellbeing measure are utilized on all patients, paying little respect to information about their disease status. "Health care workers" (HCWs) are at danger of different word related perils in the doctor's facility, including presentation to blood borne contaminations, for example, HIV and hepatitis B and C infection from sharps wounds and contact with body liquids (Maji, 2006).

World Health Organization, (2006) defined health personnel as a medical expert or medical supplier, is a person who gives preventive, therapeutic, constrained time or rehabilitative organizations deliberately to people, families or gatherings. A therapeutic expert might work inside of all branches of restorative consideration, including specialists, dental practitioners, medical caretakers, drug specialists, psychologists or allied health professions. A therapeutic expert might likewise be an open/group health capability working for the benefit of the general public. Medical care experts incorporate doctors, dental specialists, drug specialists, doctor collaborators, attendants, propelled rehearse enlisted attendants, specialists, specialist's right hand, athletic mentors, surgical technologist, maternity specialists, dietitians, advisors, analysts, chiropractors, clinical officers, social authorities, phlebotomists, word related consultant, physical counselors, radiographer, respiratory guides, audiologists, talk pathologists, optometrists, emergency remedial specialists, paramedics, helpful exploration focus analysts, restorative prosthetic specialists and a wide arrangement of other HR arranged to give some kind of human administrations organization (WHO, 2010). They as often as possible work in centers, human administrations centers, and other organization movement concentrates, moreover in academic get ready, investigation, and association. Some give thought and treatment organizations to patients in reserved households. Several nations have a considerable amount for gathering wellbeing authorities whom labor out-side official human administrations establishments. Head of social protection organizations, wellbeing information experts, and other assistive staff and support workers are in like manner saw as a fundamental bit of human administrations gatherings'

Despite the information, the medicinal services workplace keeps on being disregarded by governments and associations (Manyele, Ngonyani, & Eliakimu, 2008) A higher yearly pervasiveness of back agony (77%) among human services laborers contrasted with other word related gatherings has been accounted for (Lipscomb and Rosen stock, 1997, Andersen, Clausen,

Mortensen, Burr, & Holtermann 2012). Ergonomic related wounds represent a critical wellbeing danger to specialists but it is the most pervasive word related damage in medicinal services industry (Ijzelenberg, & Burdorf 2005). Human services laborers are presented to blood-borne contaminations which for the most part open them to sicknesses, similar to TB, (Gupta, (2011). Generous horribleness and mortality among these laborers definitely prompt loss of talented staff and unfavorably affect social insurance administrations which are as of now stressed in numerous little and focus wage nations.

In Africa, the lack of human asset for wellbeing is portrayed as a philanthropic asset emergency because of huge migration of prepared experts, troublesome working conditions, poor pay rates, low inspiration, and high weight of irresistible infections, especially HIV/AIDS (Wilburn & Eijkemans, 2004). Proof demonstrate that social insurance staff remain frequently unprotected to substance, hereditary, physical, ergonomic/psychosocial word related threats. They are consistently in contact with patients that open them to defilements and consequently require fitting guarded measures to lessen their threat of acquiring of sickness or mischief. Information on work related perils among restorative administrations pros and their easing procedures stay uncommon in Nigeria and particularly Rivers state. Respecting the partner of work related danger among restorative administrations experts is relied upon to teach work related wellbeing and security procedure and undertakings for social protection workers. This study reviewed the partner of work related perils among human administrations workers to teach work related wellbeing and security system undertakings for social protection experts in Port Harcourt, Rivers State.

THE PROBLEM, AIM AND THE OBJECTIVES OF THE RESEARCH

Health workers in specialist hospitals, Rivers State are faced with occupational hazards, like stress, needle sticks, and exposure to body fluids, falls, cuts, violence and assaults which was observed by the researcher. The issue of violence against the health sector in humanitarian emergencies has grown such that it was specifically addressed as the 65th world Health Assembly (WHO, 2012). Most often health workers are exposed to psychological hazards like stress, fear caused by verbal abuse, work related drug or alcohol consumption, depression and intimidation in the workplace. These psychosocial hazards can have a variety of different impacts.

Based on this, the researcher decided to find out the correlates of occupational hazards among health workers in specialist Hospitals, Port Harcourt, Rivers State.

The aim of the study therefore, was to find out correlates of occupational hazard among health workers in specialist hospitals, Port Harcourt, Rivers State., with specific objectives to:

1. Determine relationship between infrastructure and occupational hazard (physical, psychosocial, biological, chemical, ergonomic) among health workers in specialist hospitals, Port Harcourt, Rivers State.
2. Ascertain the relationship between remuneration and occupational hazard among health workers in specialist hospitals, Port Harcourt, Rivers State.
3. Determine the relationship between personnel and occupational hazard among health workers in specialist hospitals, Port Harcourt, Rivers State.
4. Uncover the relationship between working environment and occupational hazard among health workers in specialist hospitals, Port Harcourt, Rivers State.
5. Reveal the relationship between attitude to work and occupational hazard among health workers in specialist hospitals, Port Harcourt, Rivers State.
6. Ascertain the relationship between management style and occupational hazard among health workers in specialist hospitals, Port Harcourt, Rivers State
7. Ascertain the relationship between working experience and occupational hazard among health workers in specialist hospitals, Port Harcourt, Rivers State
8. Determine the relationship between age and occupational hazard among health workers in specialist hospitals, Port Harcourt, Rivers State

Theoretically, several models were considered in the analysis - Health Belief Model, Trans-theoretical Model, Cultural theory and risk. The Conceptual framework of the concept of occupational hazards among health workers - Classification of hazard among health workers and Causes of hazard among health workers.

Health Belief Model

One of the essential theories of wellbeing direct, the wellbeing conviction model was made in the 1950s by social specialists Irwin M. Rosenstock, Godfrey M. Hochbaum, S. Stephen Kegeles, and Howard Leventhal at the U.S. General Health Service to better grasp the expansive dissatisfaction of screening ventures for tuberculosis. (Rosenstock, Irwin 1974, Carpenter and Christopher, 2010). The health belief Model has been

associated with predict a wide variety of wellbeing related practices, for instance, being screened for the early recognizable proof of asymptomatic diseases and getting immunizations. All the more as of late, the model has been connected to comprehend patients' reactions to side effects of sickness, consistence with therapeutic regimens, way of life practices (e.g., sexual danger practices), (Carpenter and Christopher 2010) and practices identified with unending ailments, which might require long haul conduct support notwithstanding beginning conduct change.

Theoretical constructs of health belief model

The accompanying develops of the health belief health are proposed to differ in the middle of people and foresee commitment in wellbeing associated practices (e.g., receiving inoculated, reception for asymptomatic sicknesses, working out) (Glanz, et al, 2008) (Figure 1)

Perceived severity of health model

Carpenter and Christopher (2010) "Perceived severity refersto subjective examination of the seriousness of a health issue and its potential results, the health belief model prescribes that individuals who see a given health issue as certifiable will likely partake in practices to keep the health issue from happening (or decrease its reality), Seen sincerity conceals feelings about the disease itself (e.g., whether it is life-incapacitating or may achieve failure or torment) and also more broad impacts of the disorder on working in work and social parts" Glanz, et al, (2008). For example, an individual might see that flu is not therapeutically true blue, but rather on the off chance that he or she sees that there would be dead genuine cash related results as a possible result of being truant from work for several days, then he or she might see flu to be an especially true blue condition.

Perceived Susceptibility of Health Belief Model

Perceived susceptibility refers to subjective evaluation of risk of adding to a wellbeing issue. The wellbeing conviction model predicts that people who see that they are helpless to a specific wellbeing issue will take an enthusiasm for practices to reduce their danger of working up the wellbeing issue. People with low saw weakness might deny that they are at danger for getting a specific ailment. Others might see the likelihood that they could add to the contamination, yet trust it is doubtful. People who trust they are at okay of adding to a disorder will probably share in unpleasant, or unsafe, sharpens. People who see a high risk that they will be in the long

The Health Belief Model

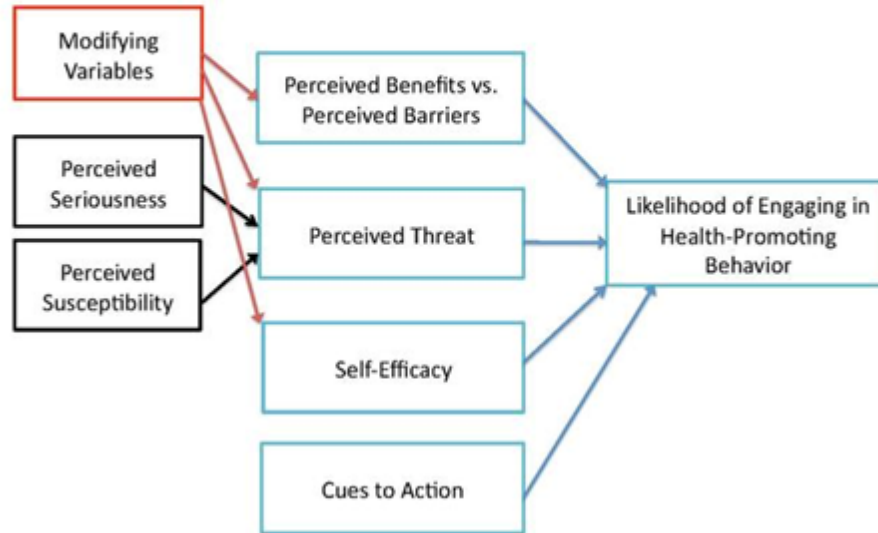


Figure 1. The Health Belief Model

run influenced by a specific wellbeing issue will apparently take an enthusiasm for practices to diminish their danger of working up the condition.

Perceived Benefits of Health Model

Perceived Benefits of Health Model are besides influenced by the obvious purposes of enthusiasm of making a move. Seen purposes of interest suggest an individual's appraisal of the quality or adequacy of joining in a wellbeing raising conduct to diminishing risk of infection. On the off chance that an individual trusts that a specific development will decrease weakness to a wellbeing issue or diminishment its validity, then he or she is committed to join in that direct paying little respect to target certainties concerning the sufficiency of the movement. For instance, people who accept that wearing sunscreen evades skin tumor will probably wear sunscreen than people who expect that wearing sunscreen won't keep the event of skin threat.

Perceived barriers of Health Belief Model

Health related practices likewise an element of saw obstructions to making a move. Seen boundaries allude to an individual's appraisal of the deterrents to conduct

change. Regardless of the fact that an individual sees a health condition as undermining and trusts that a specific activity will viably diminish the risk, hindrances might counteract engagement in the health advancing conduct. As it were, the apparent advantages must exceed the apparent obstructions all together for conduct change to happen. Seen hindrances to making a move incorporate the apparent disadvantage, cost, threat (e.g., symptoms of a therapeutic system) and uneasiness (e.g., torment, enthusiastic miracle) included in taking part in the conduct. Case in point, absence of access to reasonable medicinal services and the observation that an influenza immunization shot will bring about critical agony might go about as boundaries to accepting this season's flu virus antibody.

Modifying Variables of Health Belief Model

Specific qualities, including demographic, psychosocial, and fundamental variables, can affect affirmations (i.e., saw reality, vulnerability, purposes of hobby, and cutoff points) of wellbeing related practices. Demographic variables join age, sex, race, ethnicity, and get ready, among others. Psychosocial variables join identity, social class, and amigo and reference pack weight, among others. Vital variables solidify learning around a given tribulation and before contact with the sickness, among

different segments. The wellbeing conviction model recommends that modifying variables sway affecting with a specific end goal to wellbeing related practices by proposal saw truthfulness, powerlessness, great circumstances, and obstructions.

Cues to Action of Health Belief Model

The "health belief model" places a sign, is important for provoking appointment in wellbeing advancing practices. Signs to activity can be inner or outer. Physiological prompts (e.g., torment, side effects) are a sample of inner signals to activity. Outer signals incorporate occasions or data from close others, the media, or human services suppliers advancing engagement in health related practices. Illustrations of signs to activity incorporate an update postcard from a dental practitioner, the disease of a companion or relative, and item health cautioning names. The force of signs expected to incite activity changes between people by saw weakness, reality, advantages, and hindrances. For instance, people who trust they are at high hazard for a genuine sickness and who have a set up association with an essential consideration specialist might be effectively induced to get screened for the ailment subsequent to seeing an open administration declaration, while people who trust they are at generally safe for the same disease furthermore don't have solid access to medicinal services might require more extraordinary outer signals keeping in mind the end goal to get screened.

Self-Efficacy of Health Belief Model

Self-efficacy was added to the four sections of the "health belief model" (i.e., saw powerlessness, reality, advantages, and obstructions) in 1988. Self-efficacy proposes an individual's impression of his or her wellbeing to enough perform a conduct. Self-efficacy was added to the wellbeing conviction model attempting to better elucidate solitary differences in wellbeing rehearses. The model was at first made in order to elucidate engagement in one-time wellbeing related practices, for instance, being screened for malady or tolerating an immunization. At last, the wellbeing conviction model was associated with more liberal, whole deal conduct change, for instance, diet alteration, work out, and smoking.

Applications for Health Belief Model

The health belief model has been utilized to create viable intercessions to change targeting so as health related practices different parts of the model's key builds.

Intercessions in view of the health belief model might expect to increment saw weakness to and saw earnestness of a providing so as to health condition training about pervasiveness and rate of sickness, individualized appraisals of danger, and data about the outcomes of illness (e.g., medicinal, money related, and social results). Intercessions might likewise expect to adjust the money saving advantage investigation of participating in a health advancing conduct (i.e., expanding saw advantages and diminishing saw boundaries) by giving data about the adequacy of different practices to lessen danger of illness, distinguishing basic saw obstructions, giving impetuses to take part in health advancing practices, and connecting with social backing or different assets to energize health advancing practices. Moreover, mediations in view of the health belief model might give signs to activity to remind and urge people to take part in health advancing practices. Intercessions might likewise intend to help self-viability by giving preparing in particular health advancing practices, particularly for complex lifestyle changes (e.g., changing eating normal or physical activity, holding quick to a convoluted solution regimen). Interventions can be away for the individual level (i.e., working one-on-one with individuals to grow engagement in wellbeing related practices) or the societal level (e.g., through sanctioning, changes to the physical environment)

Trans theoretical Model of Behavior Change

The trans theoretical model of behavior change evaluates a person's availability toward follow up off another more beneficial conduct, and gives systems, or procedures of progress to manage the person concluded they phases for progress to Accomplishment and Conservation. The trans-theoretical model is also known by the truncation "TTM" and by the expression "periods of advancement. James O. Prochaska of the University of Rhode Island and accomplices added to the trans theoretical model beginning in 1977). "It relies on upon examination and usage of different theories of psychotherapy, in this way the name "trans theoretical." Prochaska and associates refined the model on the premise of exploration that they distributed in companion investigated diaries and books" (Prochaska, &Norcross, 2010).

Stages of behavior Change

Trans-theoretical model, "change is a process involving progress through a series of stages:"

Pre-contemplation (Not Ready)-"People are not intending to take action in the foreseeable future, and can be unaware that their behaviour is problematic"

Contemplation (Getting Ready)- "People are beginning to recognize that their behaviour is problematic, and start to look at the pros and cons of their continued actions"

Preparation (Ready)- "People are intending to take action in the immediate future, and may begin taking small steps toward behaviour change"

Action – "People have made specific overt modifications in modifying their problem behaviour or in acquiring new healthy behaviours"

Maintenance – "People have been able to sustain action for at least six months and are working to prevent relapse"

Termination – "Individuals have zero temptation and they are sure they will not return to their old unhealthy habit as a way of coping"

Relapse/Recycling: In addition, the researchers conceptualized "relapse" (recycling) which is not a stage in itself but rather the "return from Action or Maintenance to an earlier stage."

Each Stage details

Stages of Change

Stage 1: Pre-contemplation (Sub consciousness)

The theory consists of four "core constructs": "stages of change," "processes of change," "decisional balance," and "self-efficacy." People at this stage don't hope to start the strong direct within the near future (within 6 months), and may be oblivious of the need to change. People here take in additional about strong behavior: they are asked to consider the stars of changing their behavior and to feel emotions about the effects of their contrary behavior on others. Pre-contemplators normally think minimal about the masters of changing, overestimate the cons, and as often as possible don't think about submitting such blunders. A champion amongst the best steps that others can help with at this stage is to urge them to end up more aware of their choice making and more aware of the distinctive positive circumstances of changing an undesirable conduct. Figure 2

Stage 2: Contemplation (consciousness)

At this stage, individuals are hoping to start the sound behavior within the accompanying 6 months. While they are regularly now more aware of the masters of changing, their cons are about identical to their Pros. This hesitance about changing can make them keep putting off making a move. People here get some answers

concerning the kind of individual they could be if they changed their behavior and acquire from people who carry on in strong ways. Others can effect and help enough at this stage by encouraging them to work at lessening the cons of changing their behavior.

Stage 3: Preparation (pre-action)

Individuals on is phase are prepared towards begin making a move inside of the following 30 days. They make little strides that they accept can offer them some assistance with making the solid conduct a piece of them be alive. For example, the expression that loved ones who need to adjust their conduct. Individuals in this phase ought to remain urged towards appearance for backing from companions the belief, inform individuals concerning their arrangement towards modification of the way they performed, and consider in what way they will sense on the off chance that they carried on healthier. Their number one concern is: the point at which they perform.

Stage 4: Action (current action)

Individuals at this stage have changed their conduct inside of the most recent 6 months and need to attempt to continue pushing forward. These people need to understand how to stimulate their commitments to change and to battle longings to slip back. Individuals in this stage progress by being taught systems for keeping up their commitments, for case, substituting rehearses identified with the grievous conduct with important ones, remunerating themselves for wandering toward changing, and dodging individuals and circumstances that bait them to act in repulsive ways.

Stage 5: Maintenance (monitoring)

Individuals at this stage changed their conduct over 6 months back. It is key for individuals in this stage to consider circumstances that might entice them to slip by the day's end into doing the appalling lead especially unpleasant circumstances. It is suggested that individuals in this stage scan for backing from and visit with individuals whom they trust, put imperativeness with individuals who act in solid ways, and survey to join in sound exercises to change in accordance with push as opposed to depending upon undesirable conduct.

Stage 6: Relapse (resuming)

The fall far from the confidence stage in the TTM indicate particularly applies to people who effectively quit smoking or utilizing meds or liquor, just to continue with these shocking practices in the Maintenance stage. People who endeavor to stop exceedingly addictive practices, for



Figure 2

occurrence, arrangement, liquor, and tobacco use are at especially high danger of a lose the confidence. Accomplishing an entire arrangement conduct change oftentimes requires propelling support from relatives, a wellbeing guide, an expert, or another motivational source. Strong composed work and particular assets can likewise be important to keep up a key division from a slip into sin from happening.

Processes of change

The 10 techniques of advancement are "covert and clear exercises that individuals use to advance through the stages." To progress through the early stages, individuals apply insightful, overflowing with feeling, and evaluative system. As individuals move toward Action and Maintenance, they depend more on commitments, framing, possible results, organic controls, and sponsorship. Prochaska and relates express that their examination related to the transtheoretical model shows that interventions to change behavior are all the more convincing if they are "stage-composed," that is, "facilitated to each individual's period of advancement." (Prochaska and Velicer, 2009. See Figure 3

In general, for individuals to advance they require:

1. A creating care that the purposes of hobby (the "specialists") of changing surpass the weights (the "cons") the TTM calls this decisional equality.
2. Confidence that they can take off and keep up upgrades in circumstances that allure them to return to their old, terrible behavior the TTM calls this self-practicality.
3. Strategies that can offer them some help with rolling out and keep up improvement the TTM calls these techniques of advancement. The ten systems include:
 - i. Consciousness-Raising extending care by method for information, preparing, and singular

- ii. feedback about the strong behavior.
- ii. Dramatic Relief feeling fear, anxiety, or weight by virtue of the undesirable direct, or feeling inspiration and trust when they get some answers concerning how people can change to strong practices
- iii. Self-Reevaluation understanding that the strong behavior is a basic bit of who they are and should be
- iv. Environmental Reevaluation recognizing how their appalling behavior impacts others and how they could have more useful results by advancing
- v. Social Liberation understanding that society is more solid of the sound behavior
- vi. Self-Liberation confiding in one's ability to change and making obligations and recommitments to catch up on that conviction
- vii. Helping Relationships finding people who are solid of their change
- viii. Counter-Conditioning substituting undesirable strategies for acting and thinking for strong ways
- ix. Reinforcement Management—extending the prizes that start from positive lead and decreasing those that begin from negative behavior
- x. Stimulus Control—using upgrades and signs that bolster strong behavior as substitutes for those that stimulate the shocking behavior.

Decisional balance

This center build "mirrors the individual's relative weighing of the upsides and downsides of evolving." (Prochaska and Velicer, 2009) Decision making was conceptualized by Janis and Mann as a "decisional asset report" of similar potential increases and misfortunes (Hall and Rossi 2008) Decisional parity measures, the experts and the cons, have gotten to be basic develops in the trans-hypothetical model. The upsides and downsides join to frame a decisional "monetary record" of relative potential additions and misfortunes. The harmony

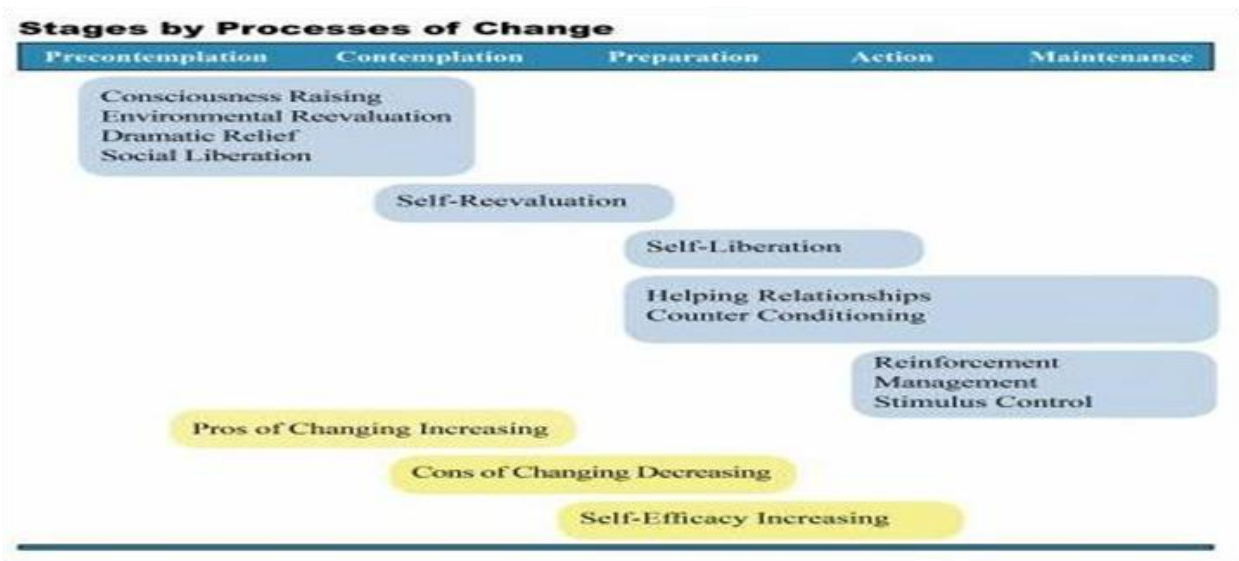


Figure 3

between the advantages and disadvantages shifts relying upon which phase of progress the individual is in.

Cultural Theory and Risk

Mary Douglas is credited with being the originator of the cultural theory of risk. With a background in anthropology, her interest in risk in industrial societies evolved from her work in the 1960s on pollution and dangers in tribal societies. In *Purity and Danger* (Douglas, 1966) she takes on the task of "vindicating the so-called primitives from the charge of having a different logic or method of thinking" (Douglas, 1992). Douglas argues that the 'danger' taboos linked to acts of pollution by primitive groups play an intelligible role in maintaining particular forms of social order. There is always some explanation for the misfortunes that befall individuals' within any social group, but Douglas claims that social groups hold consistent forms of explanation for misfortune.

A similar example is where it is believed that a wife's adultery may cause her husband to receive a fatal arrow wound. The function of the linkage between danger and blame is to uphold judgments of appropriateness and hence to reproduce a particular social order. Using a similar link between the appearance of a danger and the blaming process we can identify some more familiar examples. It is known that in fourteenth century Europe, poor water quality was a persistent danger, but the issue only became politicized when persecution of the Jews began and as part of that process, they were blamed for poisoning well-water (Douglas & Wildavsky, 1983) This link between events and the varying processes by which

blame is attached is called the forensic model of danger. The allocation of responsibility for hazard events is a "normal strategy for protecting a particular set of values belonging to a particular way of life shared confidence and shared fears, are part of the dialogue on how best to organize social relations" (Douglas & Wildavsky, 1983). According to the forensic model, the selection of dangers (risks) is unavoidably political in all simpler societies and, by implication, in all industrial societies. If these examples seem to be the products of 'primitive' mysticism, consider the modern example of HIV (Douglas, 1992). As awareness of HIV increased in the 1980s, the linkage of the condition to the perceived immorality of homosexuality and promiscuity was common, to the extent that one would have to assume that the virus was capable of making a moral judgment. Douglas (1992) acknowledges that she failed to apply this forensic model to what industrial society calls 'risk' for too long. It was argued that dangers had been disengaged from politics and ideology to be dealt with objectively by science. Technology supposedly allows industrial societies to identify the objective causes of dangers, and so their forensic quality is lost. The 1970s brought a surplus of examples as fissures appeared in the foundations of scientific endeavour. Technology became a source of danger in itself and scientific knowledge was found to be lacking in critical areas. This is the basic argument of Beck's Risk Society. The private sphere of commercialization and consumption was imposing a particular class of risk, driven by technology and promoted by science that led to a feeling amongst certain groups that risk was indentured in the very nature of

emerging society. It was the combination of iniquitousness, powerlessness and dependency on the very science and technology that created the risk in the first place that gave Beck his publicity. The forensic links between dangers and blame were re-established in attacks on government for its failure to restrain industry and in the defiance of the 'naturalness' of natural resources. The first explicit link between the emerging risk crises and Douglas' work was made by Thompson (1988). He adopted a typology introduced below to explore West German risk perceptions regarding nuclear energy and views on uncertainty held among Himalayan Sherpa Buddhists. He argued that the forensic uses of risk are as pervasive as in the tribal societies Douglas described in *Purity and Danger*. There is now a system that is "almost ready to treat every death as chargeable to someone's account, every accident as caused by someone's criminal negligence, every sickness a threatened prosecution. (Douglas, 1992). Central to cultural theory is the assertion that the differences between the taboos of 'primitives' and risk in modern society is a difference of degree. Douglas suggests that the terms risk and taboo could be subsumed under the more encompassing term 'dangers'. The claims for the universality of the forensic uses of danger implies that: The modern concept of risk, parsed now as danger, is invoked to protect individuals against the encroachment of others. It is part of the system of thought that upholds the type of individualist culture, which sustains an expanding industrial system. The dialogue about risk plays the role equivalent to taboo or sin, but the slope is tilted in the reverse direction, away from protecting the community and in favour of protecting the individual (Douglas, 1992).

Re-uniting primitives and moderns

Douglas was approached by a political scientist, Aaron Wildavsky, to apply the forensic model to the United States. The result of this challenge was the development of a single forensic theory of danger that applied equally to 'moderns' and 'primitives' (Douglas & Wildavsky, 1982). The resulting book, *Risk and Culture*, is nowadays regarded as a key text for understanding the origins of cultural theory. The world appears to be a less hazardous place than it was even 50 years ago, simply because most people in developed countries live longer. Douglas & Wildavsky explain why it is that in countries such as the United States, where hazards have systematically been decreased, people feel more at risk. Specifically, these authors seek to explain the rise of environmentalism in the US in the late 1960s and 1970s and the appearance of 'troubled nature'. Given that the prevalence of lethal hazards has diminished, the thesis is that the feeling of being more 'at risk' must be social in origin. Douglas &

Wildavsky argue that there has been a constant tension between the 'Center' and the 'Border' in US politics. The Center incorporates two enduring categories in western political thought: the market and the hierarchy. The market represented innovation, individualism and progressivism, while the hierarchy protected the general social order against the excesses of market opportunism.

The one needed the other for its positioning and influence. Douglas (1985), Ostrander (1982) and Thompson et al. (1997) explore the persistence of these forms of organization in the twentieth century and suggest that most attempts to expand beyond three or four forms of social order invariably collapse back into these two. The central argument in *Risk and Culture* is that neither category is adequate for describing the form of organization and activity that became prevalent in the US in the 1960s and 1970s. This they call the 'Border'. This axis of tension between the 'Center' and the 'Border' is embodied in the US constitution and protects citizens from the worst ravages of 'big government'. On a shorter timescale they show that there was a concentration of power in the 'Center' as a result of the depression of the 1930s, the Second World War and the rise of international communism. By the 1960s and 1970s the validity of this concentration of power was being questioned. Furthermore, two events were identified as weakening faith in the 'Center'. The first was the Vietnam War, which challenged the legitimacy of foreign intervention and conscription. The second was the discrediting of President Nixon in the Watergate affair. Watergate revealed such widespread and organized political corruptions that trust in the institutions of government was substantially degraded. These historical events combined with demographic and economic shifts leading to a more mature and affluent US society. The 'Border' became a critical vocal group whose ideological positions increasingly differed from those of the 'Center'. Douglas & Wildavsky argue that one consequence of the weakening of the 'Center' was a rise in a type of organization known as the 'sect'. The term is usually applied to religious groups like the Amish, but Douglas & Wildavsky argued that they share many structural similarities with environmental groups. Sects have always been present at the 'Border' of US society but have been ignored due to their tendency to isolate themselves. The key similarity between the emergent sects and their religious analogues lay in their commitment to shared equality amongst the members of the group, as embodied in the concept of egalitarianism. Newly emergent environmental groups took on egalitarian principles, not so much as an active choice, but because of the absence of an alternative.

The grid-group typology

The formalization of Douglas' ideas on pollution and

danger in her earlier work (Douglas, 1966, 1970) came with the development of a formal typology based on two axes: grid and group (Douglas, 1978). This typology has become the best known element of the cultural theory of risk. Indeed, the typology is often confused with the theory within which it is embedded (Boholm, 1996). This is why we have sought to explore the theoretical antecedents to cultural theory, before discussing the grid-group typology.

Grid/group dimensions and solidarities

In *Essays in the Sociology of Perception* (1982), Mary Douglas sets out the basic assumptions behind two axes of the typology. Firstly, she considers the minimum forms of commitment to life in a society postulated by political theory. These are represented in terms of the strength of allegiance to a group. Secondly, she considers the extent of regulation within or without the group; this is the grid axis. For instance, a military regiment with its prescriptions for behaviour and rigid timetabling represents a high grid social environment. Ostrander defines the two axes succinctly by arguing that social order limits the freedom of individuals in two spheres: whom one interacts with (group), and how one interacts with them (grid). Another succinct definition considers the dimensions in terms of two questions related to identity, to which social institutions provide answers: who am I and what can I do? (Hoppe & Peterse, 1994).

Group refers to the extent to which an individual is incorporated into bounded units. The greater the incorporation, the more individual choice is subject to group determination. Grid denotes the degree to which an individual's life is circumscribed by externally imposed prescriptions (Thompson et al, 1990).

Thompson (1997) describes the four social contexts as solidarities. This is helpful because it emphasises the way in which institutional forms bind individuals by defining accepted forms of behaviour. Hierarchies and sects have strong group dimensions. For instance, hierarchies clearly differentiate an individual's role relative to the roles of other members of the group. This form is typical of bureaucracies and emphasizes rules and order. Sectarian forms emphasize equality, and solidarity is often reinforced through the identification of external dangers. Markets and isolates are characterized by a weak group dimension to their social solidarity. This does not imply an absence of society or sociality. The conventional example of an individualist institution is the market, where individuals are unconstrained by the rules of a hierarchical institution or the strong demands of a group. Markets involve the formation of networks that are fluid, opportunistic and non-constraining. Isolates are constrained by a high grid dimension, but also have no incentive to form groups. As a form of solidarity, it is the

most difficult to understand because the weak grid dimension implies an absence of power. These institutions are sometimes left out of the typology because they are politically bereft (Coyle, 1994). Perhaps they are best understood if one acknowledges that some form of solidarity is better than none.

The essence of culture is the need to impose some form of order on the life world, even if this is a common sense of resignation. The grid dimension monitors behaviour in general, but also applies to symbolic action. In high grid situations, symbolic action will be routinised, whilst in low grid contexts it will be personalized. Ostrander (1982) also focuses on the interactional level. He identifies a 'stable diagonal' between hierarchies and markets that suggests they can form enduring social structures. The opposite diagonal between isolates and sects is unstable, so enduring social structures are less likely. There are two implications of these tendencies towards stability and instability. Firstly, across the stable diagonal there will be a tendency to see the cosmological order as having positive value. Secondly, across the stable diagonal we may begin to see an elaboration in the symbolic system as a consequence of long traditions of doctrine and interpretation. Ostrander suggests that with time, the elaboration will tend to be greater than any individual can master. This helps to reinforce the differentials inherent to a hierarchy. Increasing specialization satisfies the goals of those active in a particular culture.

SUMMARY

In analyzing the demographic and management factors as correlates of occupational hazards among health workers in specialist hospitals, Port Harcourt, Rivers State revealed that the selected models including the Health Belief Model which is associated with predicting a wide variety of wellbeing related practices, especially, recognizable proof of asymptomatic diseases and getting immunizations. It is further used to establish viable intercessions to change targets in health related practices.

Relatively, the Trans Theoretical Model of behavior change instead evaluates a person's availability toward follow up of another more beneficial conduct, and gives systems to managing the person's phases for progress to accomplishment and conservation, regardless of their postulations and expertise of the healthcare personnel – medical care, therapeutic administration - the typical work environment related exposures - infrastructure and staff attitude are positive significant predictors of occupational hazards, while remuneration, personnel, working environment and management style were not significant predictors of occupational hazards among health workers.

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