Periodical Screening and Health Education at Work: Producing Healthy Workforce

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Abstract

This article investigates the benefit of workplace wellness programs, their prevalence, their impact on employee’s health and medical cost, facilitators of their success in each programs (Workplace Wellness Programs Study Soeren Mattke, et.al.)

Workplace-based health and wellness programs (HWPs) may be an obvious yet under-utilized strategy for promoting positive health-related behaviors among older workers and for increasing their ability to continue to work. Given the unprecedented number of older adults who extend their labor force attachment beyond traditional retirement ages, a new vision of older adults’ economic security and overall quality-of-life should take into account the intersections of aging, work, and health.

Introduction

Periodic health screening

Over the last several decades, an epidemic of “lifestyle diseases” has developed in the Nigeria; especially at work place environment. Unhealthy lifestyles, such as inactivity, poor nutrition, tobacco use, and frequent alcohol consumption, are driving up the prevalence of chronic disease, such as diabetes, heart disease, and chronic pulmonary conditions. These chronic conditions have become a major burden, as they lead to decreased quality of life, premature death and disability, and increased health care cost during work and after.

The periodic health screening is to evaluate health status, screen for risk factors and disease, and provide preventive counseling interventions in an age-appropriate manner. The goal of screening and evaluation is to prevent the onset of disease or the worsening of an existing disease. For example, measurement of blood pressure is intended to detect hypertension so as to initiate treatment and prevent subsequent morbidity (e.g., stroke or renal failure) or mortality. A further goal of the periodic health examination is to educate patients about behavioral patterns or environmental exposures that pose risks for future diseases. Examples include counseling about smoking prevention and cessation to prevent lung cancer and emphysema, seat belt use to prevent motor-vehicle injuries, or modifying sexual practices to prevent the spread of sexually transmitted disease. Workers with daily task can be exposed to health hazards that may be debilitating and life threatening. The Whole-population screening by routine periodic general health checks is an attractive concept for the general public, politicians and professionals with an interest in public health. Intuitively health checks seem to offer the opportunity for early detection of risk factors for the common causes of morbidity and mortality, or early stages of actual disease, with a subsequent prevention of diseases and disorders by early identification and treatment of risk factors is a major element of public health practice. In this article presentation explanation are broadly divided prevention interventions into those at the individual and population level at workplace. The population strategy targets whole populations irrespective of individual risk status, while the individual strategy targets those thought to be at ‘high risk’ of the health conditions of interest opportunity of early intervention and consequent reduction in the population disease burden. Such logic has led to widespread provision of health checks has also extended into occupational health practice, and occupational health services commonly offer and run
such programmes on behalf of public and private employers. Such screening services are frequently promoted by occupational health services to employers on the premise of reduced disease burden in employees and subsequent reduced sickness absence.

**Purpose of study, methodology and result**

**Purpose of study:** The rationale for hypothesizing that health screenings would be effective independent of additional behavioral change programming is that employees who are aware of their health status may be motivated to make behavioral changes on their own, identify other sources of support for making behavioral changes, or seek follow-up medical care.

**Method of research:** Qualitative research method

**Sampling methods:** Are the number various age groups of FTEs (full time employees) in a food beverage organization

**Method**

In this research study, 250 employees from food beverage organization workplace, health promotion program, a program conducted since 2012 and using data from the 2012-2016 follow-up period. Participants were permanent employees aged between 25-35 years and above, with at least one follow up measurements annually. Baseline socio-demographic information was collected using a questionnaire while vital signs measurements and various blood testing were collected during annual /periodical health screenings on different screenings.

**Results:** The evidence is evaluating the effectiveness of worksite health screening demonstrates

1) Gradual decrease in various health risk and diseases attitude.

2) Enhancing positive health behavioral attitude and response that is most effective enhancing encouragement to participate in some type of health and wellness program.

3) Gradual Decrease in terminal health diseases including nil record of re-infection of co-worker, family through empowering health program/health promotion.

**Workplace screening**

Is an health monitoring act before, during and after work.
Is a medical assessment to detect diseases or identify people at risk/potential risk factors that may affect health of an individual while at work

**A workplace health program?**

- A workplace health program is a health promotion activity or organization-wide policy designed to support healthy behaviors and improve health outcomes while at work and after leaving the work (retirement).

**Types of screening**

- Vital signs
- Blood screening for FBC(*full blood count*),
- FBS/RBS(*Fasting/Random blood sugar*),
- Lipid profile, RVS(*retroviral screening*),
- HBsAg & HCV(*Hepatitis B & C*)
- Urinalysis
- ECG
- CHEST-x-ray
- Audiometry
- Spirometry
- Visual Acuity
- Etc.
Characters of healthy workforce

When seeing people beaming with smiles on their faces at work, in front of their duty desk, machine and position due to:

- Job satisfaction and achievement for the day;
- Low turnout to clinic for treatment but turnout to for counseling
- Low complaint about ailment,
- Seeking for medical advices (preventive treatment/curative in psychotherapy) were becoming encouraging by day,
- Productivity target met yielding to increase profit & benefits for employer/organization
- Reduction in time loss in concentration at work, and so on;

People will believe that, there are provision of medical health services through health personnel has empowered the employee to stay healthy and however assisting the employer to make policy on both maintaining and sustaining an healthy worker.

More so, with healthy determination on lifestyle, worker can withstand pressures, bullying, adaptive and resilience to situations.

Resuming work in 2012 February has been a tough time putting the heart and behavior of people to do right in health and safety behavior for example:

- Discouraging of spitting on the floor/sneezing into the air/attitude that can be injurious to others health
- Discouraging of floor littering/poor housekeeping,
- Value the use of signage/safety rules around the workplace
- Discouraging the use of self-medication, herbal concoction, smoking around the premises and every hazardous activity that can affect health.
- Seeking prompt medical intervention when required.
- Making more emphasis on more pre-employment screening to post employment screening.
- Maintain work life balance etc.

World health organization (WHO) literature review

Through governmental legislation and regulation, employers have been made responsible for maintaining the safety of the work environment and work practices, and for the treatment, rehabilitation and compensation of workers with occupational injuries and disease. In recent decades, however, employers have begun to recognize that disabilities and absenteeism are costly even when they originate outside the workplace. Consequently, employer has begun to provide more and more
comprehensive health promoting and protecting programs not only for employees but for their families as well.

In opening a 1987 meeting of a World Health Organization (WHO) Expert Committee on Health Promotion in the Work setting, Dr. Lu Rushan, Assistant Director-General of WHO, reiterated that WHO viewed workers' health promotion as an essential component of occupational health services (WHO 1988). (Leon J. Warshaw and Jacqueline Messite)

What is a screening?

Screening involves the utilization of a diagnostic procedure to check for the presence of a disease prior to the manifestation of clinical symptoms.

A screening is a medical assessment to detect diseases or serious health conditions. In the past, patients were treated when they became sick.

A careful history and a physical examination are important parts of the periodic health examination.

- The patient history elicits recent and current symptoms or complaints; medications being taken (and any allergies to medications); an accounting of the past medical history of the patient; the social factors that may impact on the health of the patient (e.g., marital status, household makeup, employment); a family history of illnesses affecting family members; and a review of signs and symptoms for each of the organ systems in the body.
- The physical examination consists of three modalities to gather information: inspection, auscultation, and palpation. These methods are applied in a systematic way to the major systems of the body.
- Inspection involves observation of the body part being examined. The general appearance (physical inspection), color, and any other visual characteristics are noted.
- Auscultation involves listening, often with the aid of a stethoscope.
- Palpation involves feeling both the size and texture of organs under examination. The major areas of the body to be examined are the head and neck, chest, abdomen, extremities, skin, musculoskeletal system, and nervous system.

Using the three modalities in conjunction with the patient's medical history and screening tests allows an assessment of the overall health of a patient. Now we know early detection can make health problems easier to treat and cure. Screenings improve lives, save lives, and also save money!

Types of screening

- Vital signs
- Blood screening for FBC(full blood count), FBS/RBS(Fasting/Random blood sugar), Lipid profile, RVS(retroviral screening), HBsAg & HCV, (Hepatitis B & C)
- Urinalysis
- ECG
- CHEST-x-ray
- Audiometry
- Spirometry
- Visual Acuity
- Mammogram
- Pap smear etc.

Classes of periodical screening

- Pre-employment (New intake/ Before work)
- Health profile (Annual Medical Screening)
- Food Handlers’ screening(Bi-annual, 6monthly screening)
- Complete Comprehensive Health screening (Age Restricted screening 35years &above for female and 40years and above for male).
• Pre-placement screening (transfer/inter/intra departmental fit before assuming new job position)
• Post-employment screening (Retrenchment /After work)

Health education/campaign/coaching

What is a workplace health program?
A workplace health program is a health promotion activity or organization-wide policy designed to support healthy behaviors and improve health outcomes while at work.

Workplace health promotion - What is it?
The European Network for Workplace Health Promotion has defined workplace health promotion as the combined efforts of employers, employees and society to improve the health and well-being of people at work. This vision of workplace health promotion places particular emphasis on improving the work organization and working environment, increasing workers’ participation in shaping the working environment, and encouraging personal skills and professional development.

Benefits of workforce health promotion

<table>
<thead>
<tr>
<th>To the organization</th>
<th>To the employee</th>
</tr>
</thead>
<tbody>
<tr>
<td>a well-managed health and safety programme</td>
<td>a safe and healthy workplace environment</td>
</tr>
<tr>
<td>a positive and caring image</td>
<td>enhanced self-esteem</td>
</tr>
<tr>
<td>improved staff morale</td>
<td>reduced stress</td>
</tr>
<tr>
<td>reduced staff turnover</td>
<td>improved morale</td>
</tr>
<tr>
<td>reduced absenteeism</td>
<td>increased job satisfaction</td>
</tr>
<tr>
<td>increased productivity</td>
<td>increased skills for health protection</td>
</tr>
<tr>
<td>reduced health care/insurance costs</td>
<td>improved health</td>
</tr>
<tr>
<td>reduced risk of fines and litigation</td>
<td>improved sense of well-being</td>
</tr>
</tbody>
</table>

What is health coaching?
Health Coaching is a confidential partnership between the employee and a health coach with the objective of assisting the employee to achieve his or her personal wellness goals. Health coaching utilizes effective behavioral psychology principles to assist people to make lifestyle changes.

How?
Monthly health talk given to people in their various Departments /Canteen on WHO (World Health Events topics)
Weekly Health talk/ tool box/ one point lesson sent round the intranet communication network around the brewery organization.

Research study 1
In the beginning of the year especially after the Christmas/New Year Holidays, a particular screening is done to: Identity, Assess, Coordinate Health program, implement care and Evaluate and Re-evaluate care (follow up) is called the Annual Health profile screening.
Objective of the screening is:
1) To have a data base of nature of health of a workers
2) To segregate individual for care and follow up
3) To give a guide to the health personnel for health discussion topics/programs that workers and their families can benefit
4) To give a report that can enhance achieving health and safety related policies to both employer and employee.
Table 1. Total Workforce

<table>
<thead>
<tr>
<th>Years</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>232</td>
<td>232</td>
<td>238</td>
<td>242</td>
<td>236</td>
</tr>
<tr>
<td>Female</td>
<td>18</td>
<td>18</td>
<td>12</td>
<td>8</td>
<td>14</td>
</tr>
<tr>
<td>Total</td>
<td>250</td>
<td>250</td>
<td>250</td>
<td>250</td>
<td>250</td>
</tr>
</tbody>
</table>

Table 2. Diseases Trend

<table>
<thead>
<tr>
<th>Years</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hypertension</td>
<td>32</td>
<td>26</td>
<td>22</td>
<td>18</td>
<td>16</td>
</tr>
<tr>
<td>Diabetes</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Hepatitis</td>
<td>-</td>
<td>-</td>
<td>14</td>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td>Tuberculosis</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Kidney disease</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Obesity</td>
<td>47</td>
<td>38</td>
<td>32</td>
<td>21</td>
<td>8</td>
</tr>
<tr>
<td>Others</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Discussion

The capacity of employee workforce that can occupy the brewery organization is at most 250, which in turn means that through retirement, sack the standby workforce used regularly were 250. 

The 1st table shows the sex distribution, while Table 2 shows the lineup of identified both communicable and non-communicable diseases along with their trend in reduction through: Education, treatment and monitoring.

Research study 2

As Health Surveillance Nurse in food Production industry the start of food handlers’ exercise took lot of challenges: encouraging participation not because of target but passion in having a healthy people in healthy environment, encouraging the affected ones in taking their medication on DOT (Direct Observation Therapy) and repeating their stool sample screening, monitoring they stay away from work till outcome of the repeat stool screening for Ascaris and SalmonellaTyphi.
Table 3. Participation and outcome of health screening

<table>
<thead>
<tr>
<th>Years</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ascaris</td>
<td>32</td>
<td>28</td>
<td>18</td>
<td>10</td>
<td>7</td>
</tr>
<tr>
<td>Salmonella</td>
<td>17</td>
<td>13</td>
<td>5</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>49</td>
<td>41</td>
<td>23</td>
<td>13</td>
<td>8</td>
</tr>
</tbody>
</table>

Research Study 3

Treatment success through counseling from health education

In this study, I will choose to discuss about common complaint which is STRESS in which counselling from Health Education and review discussion brought about more positive responses, compliance, and adherence to healthy lifestyle, bringing out self confidence in reducing unsafe act in self-medication use.
<table>
<thead>
<tr>
<th>Months 2015</th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>April</th>
<th>May</th>
<th>Jun</th>
<th>Jul</th>
<th>Aug</th>
<th>Sep</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-Medication</td>
<td>47</td>
<td>38</td>
<td>36</td>
<td>31</td>
<td>28</td>
<td>25</td>
<td>21</td>
<td>17</td>
<td>13</td>
<td>11</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>Health Education/Screening/Review Activities</td>
<td>0</td>
<td>2/1</td>
<td>2/1</td>
<td>2</td>
<td>2/1</td>
<td>2/1</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Counselling/Adherence treatment Visit</td>
<td>28</td>
<td>35</td>
<td>38</td>
<td>40</td>
<td>45</td>
<td>45</td>
<td>43</td>
<td>45</td>
<td>48</td>
<td>50</td>
<td>52</td>
<td>55</td>
</tr>
</tbody>
</table>
Interpretation of results

From the first row it shows, throughout the months in 2015 from Jan – Dec

The range of self-medication was reducing even when monthly Health education and health review was stable and constant creating warm atmosphere of confidence and increase relationship bonding between Medical personnel and the workforce within the organization.

Conclusion

It is clear from all of the above that the worksite health promotion programme represents an extension of the occupational safety and health programme which, when properly designed and implemented, can benefit individual employees, the workforce as a whole and the organization. In addition, it may also be a force for positive social change in the community.

Periodic health check-ups and screenings at work with health care provider are key to maximizing chance of living a longer and healthier life. Not only can they help prevent health problems before they start, but regular check-ups may also help you discover health problems early enough to increase your chances of successful treatment and recovery.

Health screenings are evaluations for employees to identify their current and potential future medical problems. The major aspect of health screening/coaching is to encourage moderate/high health risk employees to take measures to prevent the onset of worsening of a disease or illness and to adopt a healthier lifestyle.

The use of counseling as a way of responding to people in distress has grown rapidly in recent years. While it has proven popular with many people, the rapid growth of counseling has also generated some disquiet and numerous questions (Feltham 1999, 2002).

Employee Health Screenings, health promotion, health education and counseling promote overall health and wellness for employees to decrease chronic disease states, improve employee health and productivity, and reduce long-term costs.

Early detection and treatment are all beneficial to both parties: the employees and the employer!
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