A Culture of Health in Corrections & Rehabilitation

Charmaine Wright MD MSHP
Center for Special Health Care Needs
Christiana Care Health System
Correctional Facility Wellness

• Doctoring in multidisciplinary settings
  – Primary care med-peds doctor
  – CBO research partnership 10 years
    • Community living maternal initiative: postpartum weight management study
    • Dissemination to Riverside
  – Director of Center for Special Health Care Needs
    • Care of post-incarceration populations
Intervention components

• Exercise Aids
• Motivational Health Texting
• 2 Healthy feeding and eating classes
• Social support
Fit Beginnings Outcomes

- Health & Well-Being of Mom and Baby
- Birth Outcomes
- Post Release
  - Employment
  - Education
  - Housing
  - Access to Identification/Documentation
  - Access to Health Insurance/Medical Provider
“Going Home”
Re-entry: Beyond employment, education, housing

- Incarcerated females have some of the poorest health indicators in Pennsylvania
  - poor, mostly African American neighborhoods
  - disproportionately single, unemployed, and undereducated
  - 37.3% of women are obese
  - 73% of incarcerated females have mental health diagnoses
  - 84% had a minor child living with them prior to incarceration.

- No standardized way of addressing the immediate and intergenerational social determinants of health
Intergenerational effects

– Parental incarceration is considered an adverse childhood experience (ACE) associated with shame, trauma, and stigma, with lifelong consequences
– Maternal morbidity and mortality → child
Molecular pathways linking maternal and child health

The two main components of the epigenetic code

DNA methylation
Methyl marks added to certain DNA bases repress gene activity.

Histone modification
A combination of different molecules can attach to the "tails" of proteins called histones. These alter the activity of the DNA wrapped around them.

Chromosome
No Country Incarcerates More Women Than The U.S.

Top 10 countries with the largest number of female prisoners in 2013

- **Female Prison Population**
- **% of Total Prison Population**

- **USA**: 201,200 (8.8%)
- **Mexico**: 10,072 (4.5%)
- **Brazil**: 35,596 (6.9%)
- **Ukraine**: 9,697 (6.1%)
- **Thailand**: 29,175 (14.6%)
- **Vietnam**: 12,591 (11.6%)
- **Russia**: 59,002 (7.8%)
- **China**: 84,600 (5.1%)
- **Philippines**: 7,826 (8.1%)
- **India**: 15,406 (4.1%)
Before “going home”

- Incarcerated women gain 17 pounds in their first year of incarceration
  - diets high in processed foods, carbohydrates, fat and sodium
  - limited opportunities for physical movement and exercise
  - psychototropic medication
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**CANDY BARS & BAGGED SNACKS**

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<td>SNICKERS MINIATURES 4.4 OZ</td>
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**CHIPS, PRETZELS AND NUTS**

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<td>WHOLE SHABANG 1.5 OZ</td>
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Food systems

- Institutionally-run catering services
- Self-cook facilities
- Prison shops or canteens
- Informal food preparation among inmates which may take place in spite of institutional rules that prohibit such activity
- Food related to visits
- Prison gardens and farms
Why does healthy food matter?

• Cardiovascular outcomes
• Behavioral outcomes: fewer behavioral outbursts and necessary disciplinary incidents
• Health care cost
Møgelkær Prison
Denmark

Taken by Amy Smoyer PhD
Physical Activity in Prison?

• Health-promoting prisons gaining political backing from international organizations (WHO)

• Humanitarian: Individuals detained in prison must have the benefit of care equivalent to that available to the general public (Niveau, 2007)

• Health equity: well-coordinated health-promoting interventions have the potential to reduce health inequalities and address the health needs of those who are the most marginalized in society (Baybutt et al., 2010; Woodall and South, 2012)

• Public health: as those in prison often serve multiple and relatively short-term sentences, prisoners' health and the public's health are inextricably ‘intertwined’ (Williams, 2007)
French Inmates (Lagarrigue 2017)

- Most women are inactive or minimally active while most men are either minimally active or very active.
- Women spend less time walking and do less intense physical activities. The opportunity for prisoners to exercise takes place either during the time they are allowed to go for a walk in the prison yard, twice a day for 1 hour, or during organized sport programs occurring once or twice a week for 2 hours and on a voluntary basis.
Almost one-third of female offenders have spent time in care as a child.

Drug use:
- 8/10 have ever taken an illegal drug
- 6/10 have used class A drugs in the four weeks before custody
- 5/10 reported committing offences to support someone else's drug use

48% of women had a drug problem on arrival in prison.

Impact on families:
- 6/10 have dependent children
- 2/10 are lone parents before imprisonment
- 84% are serving a sentence for non-violent crime

Only 5% of children remain in their own homes while their mother is in prison.

Suicide among recently released female prisoners is 40x higher than the general population.

Mental health:
Women in prison are 5x more likely to have mental health concerns than the general female population.

65% of women in prison suffer from depression, compared to 37% of men in prison.

Women in prison accounted for 23% of all prison self-harm incidents despite representing just 5% of the prison population.

Sexual health:
Women have higher rates than men of HIV, Hepatitis C and STIs such as chlamydia infection, gonorrhoea, and syphilis.
Overlap of mental health and exercise

• Promotion of physical activity improves quality of life and decreases stress
• 29 studies: incorporate muscle relaxation, Transcendental Meditation, and certain Eastern meditative practices in the care of their clients (practical and positive) (Kristofferson 2013)
To Whom it May Concern,

I am writing this letter as a representative of the women at RE, who are concerned about their health. My name is Kaitlin Bradley (p#11446163). I am currently at RE, and a basic representative for a unit. I am also one of the numbers of the Fit Beginnings program, and I am concerned about the lack of healthy options available to us on campus and daily meals. My request is that your program assist me with implementing a healthy diet plan for women participating in the Fit Beginnings so that we can maintain good health. The problems we are trying to alleviate the following issues that alter successful dieting:

1) The excessive amount of carbohydrates being served in the daily meals, all enriched (white rice, white bread, cookies, cakes) — we need an advocate to enforce the distribution of whole grains — diabetes is rampant in RE because of the lack of healthy grains.

2) The lack of healthy options on campus such as whole grain wraps and bagels, fruit, and vegetables. Currently, the only option we have is brown rice, but there is a plethora of salt loaded unhealthy carbohydrates and processed meats.

3) Fresh flavors offers pizza, buffalo wings, cheeseburgers, cheesesteaks, calamari, and hoagies. A healthy salad with cucumber, avocados, peppers, and tomatoes can also be offered as well.

There is away to work this into the budget offering special deals with more vegetables and healthy carbs for the participants of Fit Beginnings.

Sincerely,

Kaitlin Bradley
Conclusion

• Two-generations affected by health and wellbeing during incarceration and re-entry

• New initiatives to infuse a culture of health into correction institutions from the top down
  – Nutrition
  – Exercise
  – Mental health